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CITY OF PACIFIC GROVE

LOCAL COASTAL PROGRAM

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LOCAL COASTAL PROGRAM

LAND USE PLAN

CITY OF PACIFIC GROVE

AN ELEMENT OF THE GENERAL PLAN

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APPROVED BY THE PLANNING COMMISSION March 14, 1989

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INTRODUCTION

1. INTRODUCTION

1.1 THE CALIFORNIA COASTAL ACT

In the general election of November 1972, the people of the State of California approved a ballot initiative known as Proposition 20, establishing the California Coastal Commission and six regional commissions. The charge of these commissions was to manage the coastal zone as a resource of statewide interest through the exercise of permit authority. Concurrently, the commissions were to prepare a comprehensive Coastal Plan "to preserve, protect, and where possible, to restore the resources of the coastal zone for the enjoyment of the current and succeeding generations." The Coastal Plan, completed in late 1975, served as the basis for permanent coastal legislation.

In 1976, the state legislature passed the California Coastal Act. The basic goals of the Coastal Act, as stated in the Public Resources Code, Section 30001.5, are to:

a) Protect, maintain, and where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and man-made resources;

b) Assure orderly, balanced utilization and conservation of coastal zone resources taking into account the social and economic needs of the people of the state;

c) Maximize public access to and along the coast, and maximize public recreation opportunities in the coastal zone consistent with sound resource conservation principles and constitutionally protected rights of private property owners;

d) Ensure priority for coastal-dependent development and coastal-related development over other development on the coast;

e) Encourage state and local initiatives and cooperation in preparing procedures to implement coordinated planning and development for mutually beneficial uses, including educational uses, in the coastal zone.

1.2 THE PACIFIC GROVE LOCAL COASTAL PROGRAM

A central feature of the Coastal Act is the transfer of most of the authority vested in the Coastal Commission by the Coastal Act to the local governments through adoption and certification of "Local Coastal Programs." The "Local Coastal Program" (LCP) consists of a local government's land use plans, zoning ordinance, zoning district maps and other ordinances, which when taken together, meet the requirements of, and implement the provisions and policies of the Coastal Act at the local level. Each LCP will reflect the coastal issues and concerns of the local jurisdiction and must be consistent with the statewide policies of the Coastal Act. The adopted and certified LCP is legally binding on the local jurisdiction. Certification by the Coastal Commission will result in the transfer of coastal development permit authority to the local government.

The Local Coastal Program is divided into two major parts: the Land Use Plan (LUP) and the Implementation Plan. The Land Use Plan is defined in the Public Resources Code as the "... relevant portions of a local government's general plan, or local coastal element which are sufficiently detailed to indicate the kinds, location, and intensity of land uses, the applicable resource protection and development policies, and, where necessary, a listing of implementing actions." The Implementation Plan includes zoning and ordinance revisions and proposes other programs needed to carry out the goals, policies, and land use designations of the Land Use Plan.

The Local Coastal Program is an important process in determining the future of Pacific Grove's coastal zone. Like any planning program, it must remain pertinent and up-to-date in order to be effective. The Coastal Act provides for Commission review of the LCP at least every five years, and, in addition, the City may prepare and submit LCP amendments for review by the Coastal Commission on a periodic basis. Amendments must also be "certified" before becoming effective. Commission regulations currently permit up to three LCP amendments each year.

1.3 LCP LAND USE PLAN ORGANIZATION AND SUPPORTING DOCUMENTS

The LUP is divided into four major sections, each of which focuses on a major group of Coastal Act Policies: Resource Management, Land Use and Development, Public Facilities, and, Public Shoreline Access. Each section includes background information, a summary of applicable Coastal

Act policies, a discussion of existing local policies and Land Use Plan policies.

The Land Use Plan has been developed through an extensive process of technical research, an evaluation of the experience of other coastal jurisdictions, and intensive public discussion. Several background reports were prepared by the staff of the California Coastal Commission and made available for public review and comment as part of the LUP preparation process. Consultant reports on Archaeology, Circulation, and Land Habitat Sensitivity were also prepared to support the LUP. In May 1981, the City Council appointed a Citizens' Committee to review the draft Land Use Plan and to make recommendations concerning its revisions. The Citizens' Committee's report of June 1984 contains extensive background information and policy recommendations concerning the LUP. The report, together with the other documents, is an important basis for this document. In addition there have been extensive written comments on the LUP throughout the process of its development. Taken together, these documents form the Technical Appendix and Public Response to the LUP, and are on file for review at the City of Pacific Grove Community Development Department and the Pacific Grove Public Library.

1.4 RELATIONSHIP OF LCP LAND USE PLAN TO OTHER PLANS AND LAWS

The Legislative goals and policies set forth in Chapters 1 and 3 of the California Coastal Act of 1976 constitute the guiding policies for the City of Pacific Grove's LCP Land Use Plan. The text of these policies is attached in Appendix A and should be referred to when reading this plan. Any interpretation of the policies of the Land Use Plan must be consistent with the Coastal Act.

The LCP Land Use Plan is an element of the City's General Plan. Within the coastal zone area of the City, the LCP Land Use Plan shall take precedence over the General Plan and its other elements where policies are similar or conflict. When the Land Use Plan is silent, such as concerning the subject of housing, appropriate elements of the General Plan are in force. Where policies within this plan overlap or conflict, the policy that is the most protective of coastal resources shall take precedence.

In reviewing or carrying out projects outside the coastal zone, the City will consider the effect of such projects or actions on coastal zone resources in order to ensure that the policies of the Pacific Grove LCP Land Use Plan are achieved.

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RESOURCE MANAGEMENT

2. RESOURCE MANAGEMENT

2.1 NATURAL HAZARDS

2.1.1 Background

The most significant natural hazards along the Pacific Grove coastline are large winter waves and bluff erosion. Tsunamis (seismically-induced sea waves) have a relatively lower potential for damage to life and property due to the configuration of Monterey Bay and orientation of the Pacific Grove coastline.

Although the exposed granite rock mass at the Pacific Grove shoreline is erosion-resistant, a combination of wave attack and heavy pedestrian use has resulted in localized shoreline erosion. The City has sought to remedy this problem through an on-going sea wall construction program, riprapping and/or diking. As a result, the natural character of the Bay shoreline within the City has been altered to some extent by sea wall construction between Pt. Pinos and Pt. Cabrillo.

While bluff erosion along the Pacific Grove shoreline has generally been a localized problem, the winter storms of 1982-83 resulted in extensive damage. Riprapping washed out, storm drains were damaged, and parking areas were destroyed by the strong waves from these storms. However, the immediate shoreline area is used predominately for open space/recreational purposes and there are few structural improvements seaward of Ocean View Blvd.

2.1.2 Relevant Coastal Act Policies

Coastal Act policies relating to shoreline processes and natural hazards require that shoreline protection structures, such as seawalls, only be permitted where they serve coastal-dependent uses or protect existing structures or beaches in danger from erosion, and also where designed to eliminate or mitigate adverse impacts on local shoreline sand supply. (Section 30235)

In addition, other coastal policies require that any development, such as seawalls, be sited and designed to: 1) prevent degrading impacts on adjacent environmentally sensitive habitat areas (Section 30240); 2) mitigate adverse

impacts on archeological resources (Section 30244); 3) protect ocean views, minimize the alteration of natural land forms, and be visually compatible with and subordinate to the surrounding character of the area (Section 30251); and 4) provide, and not interfere with, public access to and along the shoreline (Sections 30211 and 30212). Finally, Coastal Act policies require that all new development minimize risks to life and property in hazard areas (Section 30253(1)) and not create, nor contribute to, erosion, instability, destruction of a site, or require devices that substantially alter natural bluff and cliff forms (Section 30253(2)).

2.1.3 Existing Policies and Regulations

The combination of public ownership and existing City policies and ordinances severely limit further structural use of the immediate shoreline area. The ocean front lands are committed to open space and recreational uses by the City General Plan's Open Space/Conservation Element and Environmental Hazards Element.

The effect of the policies and land ownership along the shoreline is to reduce substantially the risks to life and property from storm/tsunami hazards and bluff erosion. However, certain policy areas, such as the effect of seawall construction, are not specifically covered by City policy, and other areas require strengthening or further implementation.

LUP policies on shoreline hazards that follow, supplement existing City policies and regulations by providing for:

- Specific attention to the possible effects of major new seawall construction;

- Implementation of City policy calling for detailed park planning along the shoreline in order to find ways to minimize bluff erosion and reduce other potential impacts on coastal resources; and

- Expanded policies on protection from storm wave/tsunami hazards.

2.1.4 General Policies

1. The City will minimize the need for new seawall construction through development of an overall Coastal Parks Plan addressing management and, where necessary, restoration

of the Pacific Grove coastal park lands, including control of pedestrian use, parking, and ground squirrel activities. Any necessary seawall construction and maintenance will be integrated into a Coastal Parks Plan.

2. The City will coordinate planning and management of the Pacific Grove coastal park lands as far as possible, with adjacent jurisdictions and other public agencies such as the City of Monterey, Monterey County, and State Department of Parks and Recreation, the State Department of Fish and Game, and the U.S. Coast Guard.

3. New seawall construction along the Pacific Grove shoreline will be limited to protection of existing coastal-dependent recreational uses and support facilities in critical danger from erosion. New seawalls shall not be constructed to serve new coastal development, nor where other measures established in the Coastal Parks Plan can adequately mitigate erosion hazards.

4. In order to minimize potential damage to life and property from storm waves and tsunamis, the use of land adjacent to the shoreline below the 20' elevation shall be limited to open space, low intensity recreational uses, support facilities, and coastally-dependent and coastally-related development at Lover's Point, Hopkins Marine Station, and Monterey Bay Aquarium.

5. The City will maintain a warning system and procedures for protection of life and property in coastal areas subject to storm and tsunami hazard.

2.1.5 Specific Policies

1. New seawall construction (including extension of existing seawalls), where determined to be necessary in order to protect existing coastal-dependent uses from erosion hazards, shall be designed to eliminate or mitigate adverse impacts on local shoreline sand supply, and other coastal resources.

2. New seawall construction (including extension of existing seawalls) shall be sited and designed to enhance coastal access; protect coastal views, minimize alteration of, and be visually subordinate to, the natural character of the shoreline; and protect archeological resources.

3. Major seawall construction (including extension or renovation of existing seawalls) shall be guided by a master plan for shoreline protection to be prepared by the City of Pacific Grove as part of the Coastal Parks Plan.

Major seawall construction shall mean improvements to a single seawall project in excess of $15,000 (1987 constant dollars) in one fiscal year and requiring the use of an outside contractor vis-a-vis force work. The term major seawall construction shall not apply to emergency repair work required to repair storm or seismic damage necessary for the protection of the public.

Shoreline protection recommendations and plans shall be developed by qualified experts in marine hydrology, shoreline processes and engineering and shall be consistent with all resource protection and public shoreline access policies of the LUP. Standards and procedures for emergency measures for shoreline protection shall be included. Until the master plan is completed, the City of Pacific Grove may make emergency repairs to existing seawalls or construct temporary shoreline protection devices when needed to protect essential public services and facilities including roads, or public shoreline access facilities.

Prior to making emergency repairs or constructing temporary shoreline protection devices along Sunset Drive, the City of Pacific Grove shall consult with the State Department of Parks and Recreation to design the most environmentally sensitive methods of accomplishing the work.

4. Signs indicating danger of large waves will be maintained at appropriate locations, and where possible will be combined with coastal access and habitat protection signing described in other sections of this plan.

2.1.6 Recommended Actions

1. Minimize erosion of the Lovers Point area through the installation of sign(s) directing people to use stairways to the beach.

2.2 ENVIRONMENTALLY SENSITIVE HABITATS: WATER AND MARINE RESOURCES

2.2.1 Background

The rich and diverse marine habitat along tne Pacific Grove coastline is protected and controlled by local and state regulations. The Pacific Grove Marine Gardens Refuge and the Hopkins Marine Life Refuge, both established by the State Legislature, as well as an Area of Special Biological

Significance (ASBS) designated by the State Water Resources Control Board, encompass the waters offshore of Pacific Grove.

In addition, the tidelands grant to the City from the State of California prohibits use of those tidelands for "commercial, industrial or revenue producing uses or purposes" although use of the tidelands for "boat and yacht harbors, boating and yachting, swimming tanks, and other like and kindred purposes" is permitted.

A study in May 1980 of the California Department of Fish and Game Marine Gardens/ASBS made several recommendations for improved management of these areas. These included more consistent enforcement of regulations, and long-term monitoring studies to detect possible effects of water pollution, or other sources of habitat degradation. Refer to the Pacific Grove LCP Working Paper #1 on Access and Natural Resources (October 1980), and the "Historical Background" section (pp. A-22-2 to A-22-9) of the Proposed Local Coastal Plan (August 1984) prepared by the City's Citizens' Committee for a more detailed discussion of marine resources.

Crespi Pond, a small but valuable wetland, is located on Ocean View Boulevard between Pt. Pinos and the western end of Asilomar Avenue. Crespi Pond provides a stopping place for migrating birds including terns, gulls, many species of ducks, and Canadian geese. In total, more than 200 different birds have been sighted. It is a site for ornithological studies, and is of interest to the scientific community. In recent years, the pond has experienced excessive plant growth, and accelerated eutrophication of the pond has become a concern. Management will be necessary to retain the open pond characteristic of Crespi Pond. This may include vegetation control and dredging.

2.2.2 Relevant Coastal Act Policies

Coastal Act policies relating to marine resources require that these resources be maintained, enhanced and, where feasible, restored; that areas of special biological significance be given special protection; and that uses protect the biological productivity of coastal waters and maintenance of healthy populations of all species (Section 30230). Control over specific types of adverse impacts on coastal waters, such as polluted runoff, wastewater discharges, etc., and spillage of hazardous substances is also required (Section 30231 and Section 30323).

Additional policies require protection of sensitive habitat areas against disruption and inappropriate use, both within and adjacent to the habitat (Section 30240); and require protection of coastal waters, wetlands, estuaries and lakes from inappropriate diking, filling and dredging, with specified exceptions (Section 30233).

2.2.3 Existing Policies and Regulations

The policies and regulations establishing the Marine Gardens/ASBS designations provide for the protection of those resources from disturbance and degradation.

The policies that follow provide for:

- Coordinated State/local enforcement of existing regulations, and enhanced management of the Marine Gardens.
- Control over runoff and erosion affecting offshore waters.
- Cooperation in long-term ecological monitoring studies.

2.2.4 General Policies

1. The City will continue to work with the State Department of Fish and Game and other agencies in developing and maintaining a coordinated approach for enforcing both State and local regulations protecting the Pacific Grove Marine Gardens.

2. The City shall assist, where possible, the appropriate institutions or agencies to undertake long-term ecological studies monitoring the marine resources and water quality of the Pacific Grove Marine Gardens and ASBS.

3. In addition to the City's tidelands, Crespi Pond and the Majella Slough riparian area shall be considered as environmentally sensitive habitat areas.

4. No diking, filling, dredging, or other uses inconsistent with the terms of the grant from the State of California shall be allowed in the City's tidelands. No significant alteration of freshwater wetlands -- Crespi Pond and Majella Slough -- shall be allowed, except for maintenance dredging and similar activities essential for restoration of natural habitats.

2.2.5 Specific Policies

1. The City shall work with the State Water Resources Control Board and Resource Conservation District to determine whether a comprehensive erosion control ordinance is needed to protect the Marine Gardens from siltation and erosion originating within the boundaries of Pacific Grove, including the area outside the Coastal Zone.

2. To reduce the potential for degradation of the ASBS/Marine Gardens, the City shall require, where necessary, drainage plans and erosion, sediment and pollution control measures. as conditions of approval of every application for new development.

3. The City shall investigate specific measures for reduction of pollution potential in stormwater runoff, including regulations to control the disposal of chemicals and hazardous materials, and maintenance of the existing stormwater capture program at the Golf Course, Greenwood Park, and Chase Park.

2.2.6 Recommended Actions

1. The City will form a technical advisory committee to review and determine what measures are needed to slow the eutrophication of Crespi Pond and to ensure the pond's continued existence.

2. An information and interpretation program to increase public awareness of the valuable marine resources and habitat in the ASBS/Marine Gardens should be maintained and expanded by the City, with its base in the Pacific Grove Museum of Natural History, the Monterey Bay Aquarium or other appropriate location. This should include appropriate signing consistent with the City's policy of protecting the visual qualities of highly scenic areas.

3. As part of the planning process for the Pacific Grove Coastal Parks Plan, the City should consider alternative approaches to coordinated enforcement of State and local regulations protecting the Pacific Grove Marine Gardens Fish Refuge/ASBS.

2.3 ENVIRONMENTALLY SENSITIVE HABITATS: COASTAL LAND RESOURCES

2.3.1 Background

The coastal zone of Pacific Grove contains several land habitats that are considered environmentally sensitive. These are the shoreline pine forest/sand dune association and the pine/eucalyptus overwintering habitat of the Monarch butterfly. The principal Monarch butterfly clustering sites in Pacific Grove are located very near, but not within, the coastal zone, in the vicinity of the Butterfly Grove Inn and in George Washington Park. However, the butterfly populations use areas within the coastal zone for feeding and transit to the groves.

The land habitat of greatest sensitivity is the sand dune complex from the Lighthouse Reservation to Asilomar Conference Grounds. Not only are native dune plants fragile, and dune formations easily destabilized, but the dunes are habitat for two endangered plant species - Menzies' wallflower and Tidestrom's lupine. Human disturbance and competition from exotic vegetation continue to threaten the survival of these rare plants. Remaining plants are found in limited areas on private land in the Asilomar area and on public property in the northern portion of the Asilomar State Conference Grounds.

A special report entitled "Habitat Sensitivity and Identification", was prepared for the LUP and provides the basis for policies in this section. The report is available for review at the Pacific Grove Community Development Department and Coastal Commission offices in Santa Cruz. The Pacific Grove LCP Working Paper #1 on Access and Natural Resources (October 1980) and the Pacific Grove LCP Citizens Committee Proposed Local Coastal Plan (August 1984) can be referred to for a detailed discussion of coastal land habitats.

2.3.2 Relevant Coastal Policies

Section 30240 of the Coastal Act requires protection of environmentally sensitive areas. These areas must be protected against "any significant disruption", including impacts from development in adjacent areas. Only resource-dependent uses are allowed in sensitive areas, and adjacent uses must be compatible with continuance of sensitive habitat areas.

2.3.3 Existing Policies and Regulations

The Open Space/Conservation Element of the Pacific Grove General Plan contains protective policies for the over-wintering sites of the Monarch butterfly, in particular Washington Park. In 1952, the City also adopted an ordinance making molestation of or interference with the Monarchs unlawful.

The Open Space/Conservation Element states as a principal objective the preservation of open space areas required by plant and animal life, including dune lands. The Open Space/Conservation Element recommends that property owners in the Asilomar Dunes area be notified of the presence of Menzies' wallflower and Tidestrom's lupine on the property, and be assisted in preserving and maintaining the plants.

The Lighthouse Reservation is identified in the Open Space Element as an area of Scientific and Ecological Significance and also as an active recreational area. Efforts are being made by the Pacific Grove Museum of Natural History to restore a native dune plant community at the Reservation.

The Lighthouse Reservation, Golf Course and adjacent shoreline areas are managed by the City under lease from the U.S. Coast Guard. The remainder of the immediate shoreline area, with two exceptions, is under State or local ownership and managed as park land.

The Asilomar State Park and Conference Grounds is covered by a State-adopted Resource Management/General Development Plan (1976), except for the immediate shoreline area (known as Asilomar State Beach). The Asilomar Plan contains a detailed evaluation of habitat types and sensitivity. The recommendations of the Asilomar Plan seek to limit the impacts of new development on sensitive areas, preserve wetland habitat (Majella Slough, the site of the former Lake Majella), restore native vegetation and control pedestrian use and impacts in fragile areas, such as sand dunes.

As part of the coastal permit process, the Coastal Commission has conditioned permits in the Asilomar dunes area to require protection of rare and endangered plant habitat. These requirements have included:

- Review of the site by a qualified landscape or botanical consultant to determine the existence and location of rare and endangered plants.

- Preparation of grading and landscape plans to minimize adverse impacts of development and construction activities on endangered plant species, including transplanting and propagation where necessary.

- Limitation of site coverage for new development, and resiting or redesigning of the project to minimize impacts on botanic resources.

- Requirement for a conservation easement to protect the nondeveloped portions of a site from disturbance and allow entry for scientific research purposes.

The following policies encourage management of City and State shoreline areas to reduce impacts on, and restore native plant habitat, and to minimize the disturbance of habitats for rare and endangered species by new development on private and public land.

2.3.4 General Policies

1. The City will maintain its protective policies and ordinances concerning the overwintering Monarch butterfly population in Pacific Grove. The City will encourage the planting and preservation of vegetation useful to the Monarch butterfly for feeding or clustering, and will ensure that any new development within the coastal zone in proximity to trees used by butterflies will not adversely affect the butterflies or the habitat.

2. The City shall protect, maintain and enhance the habitat areas of Menzies' wallflower and Tidestrom's lupine.

3. As funding is available the City will develop a Coastal Parks Plan for the management and restoration of the Pacific Grove coastal parklands, including the Lighthouse Reservation. The purpose of the Plan, in part, is to:

a) Rehabilitate areas damaged by pedestrian/auto/ground squirrel overuse;

b) Revegetate with native bluff and dune plants where feasible;

c) Protect habitats of rare and endangered species;

d) Provide defined pathways or boardwalks, where desirable, and control unrestricted parking by appropriate barriers or other means; and

e) Expand existing signs to include interpretive information for visitors.

f) Implement LCP policies on coastal access, visual resources, and seawall construction.

g) Preserve any Monarch butterfly overwintering sites which may be identified, and enhance vegetation used for nectaring and feeding by the Monarchs.

New development within the area covered by the Coastal Parks Plan shall be consistent with the standards and procedures identified by such Plan.

4. The City will use the findings and habitat classifications of the Habitat Sensitivity and Identification Study (including both text and map) prepared for the Local Coastal Program as a basis for implementing the General Policies #2 and #3 of this section. Development projects proposed within any area mapped as A-1, B-2, or B-3 on Figure 2, the Habitat Sensitivity Map, will be required to prepare a botanical survey prior to project approval. Such surveys shall be conducted, at applicant's expense, by a qualified botanic expert selected from a list to be maintained by the City, in consultation with the Museum of Natural History.

2.3.5 Specific Policies

Asilomar Dunes Area

1. New development in the Asilomar Dunes area (bounded by Asilomar Avenue, Lighthouse Avenue, and the boundary of Asilomar State Park) shall be carefully sited and designed to protect existing and restorable native dune plant habitats, as well as the native oaks and pine forest which stabilize the inland edge of the high dunes along Asilomar Avenue southwards from the vicinity of its intersection with Pico Avenue. No development on a parcel containing environmentally sensitive habitat shall be approved unless the City is able to find that, as a result of the various protective measures applied, no significant disruption of such habitat will occur. In order that the City can make the required findings of no significant disruption, the requirements listed below and in Sections 3.4.4 and 3.4.5 shall apply.

a) A botanical survey shall be required on any property having A-1, B-2, or B-3 habitats, as mapped on the Habitat Sensitivity Map (Figure 2), prior

to approval of construction of any new buildings, paved area, expansion of existing structures, subdivision of land, grading, or other development activity which could materially disturb existing natural vegetation. The botanic survey shall be conducted during the appropriate flowering season for each rare plant species potentially present; and shall be submitted to the Pacific Grove Museum of Natural History and the California Department of Fish and Game for comments prior to final acceptance by the Community Development Director.

b) Where a botanical survey identifies populations of endangered species, all new development shall be sited and designed to cause the least possible disturbance to the endangered plants and their habitat. Other stabilizing native dune plants shall also be protected.

Site coverage proposed for new development (including driveways, accessory buildings and other paved areas) shall be reduced from the maximum coverage allowed in Chapter 3 of this plan, and by relevant zoning, to the extent necessary to ensure protection of Menzies' wallflower or Tidestrom's lupine habitat determined to be present on the site.

c) During construction of new development, habitat areas containing Menzies' wallflowers or Tidestrom's lupines or other rare and endangered species shall be protected from disturbance. Temporary wire mesh fencing shall be placed around the habitat prior to construction and the protected area shall not be used by workers or machinery or for storage of materials. Compliance inspection(s) will be made during the construction phase.

d) The alteration of natural land forms and dune destabilization by development shall be minimized. Detailed grading plans shall be submitted to the City before approval of coastal development permits.

e) If an approved development will disturb dune habitat supporting or potentially supporting Menzies' wallflower, Tidestrom's lupine or other rare or endangered species, or the forest front zone along Asilomar Avenue south of Pico Avenue, that portion of the property beyond the approved building site and outdoor living space (as provided

in Section 3.4.5.2) shall be protected by a written agreement, deed restrictions or conservation easement granted to an appropriate public agency or conservation foundation. These shall include provisions which guarantee maintenance of remaining dune habitat in a natural state, provide for restoration of native dune plants under an approved landscape plan, provide for long-term monitoring of rare and endangered plants and maintenance of supporting dune or forest habitat, and restrict fencing to that which would not impact public views or free passage of native wildlife. Easements, agreements or deed restrictions shall be approved prior to commence ment of construction and recorded prior to sale or occupancy.

f) For any site where development will disturb existing or potential native dune plant habitat, a landscaping plan shall be prepared and submitted to the City for approval prior to construction. Only native dune plants should be used for landscaping within a conservation easement. Landscaping with exotic plants shall be limited to immediate outdoor living space adjacent to the proposed development (i.e., the building envelope as defined in Sec. 3.4.5.2). Invasive non-native plants - such as Pampas grass, Acacia, Genista, and non-native iceplants - pose a threat to the indigenous plant community and will not be approved as part of such landscaping.

g) Utility connections shall be installed in a single corridor if possible, and should avoid surface disturbance of areas under conservation easement.

h) Sidewalks shall not be required as a condition of development permit approval in the Asilomar dunes unless the City makes a finding that sidewalks are necessary for public safety where heavy automobile traffic presents substantial hazards to pedestrians, no reasonable alternative exists and no significant loss of environmentally sensitive habitat would result.

i) The undeveloped private parcels west of Sunset Boulevard between the Asilomar State Beach and the Lighthouse Reservation should be acquired by a public agency for protection of their outstanding scenic qualities and their potential for habitat restoration.

j) In certain cases the environmental review or coastal permit process may reveal an undeveloped private parcel which has an exceptional concentration of rare dune plants, or which includes particularly scenic views of forest and dunes westerly of Asilomar Avenue. Often, such parcels can be developed without significantly impairing these special qualities. However, where significant impairment is unavoidable, or where it is not feasible to develop the parcel in conformance with these policies, then acquisition and preservation by a charitable trust or public agency will be supported.

Coastal Parklands

2. The following recommendations shall be incorporated in the Coastal Parks Plan described in General Policy 2.3.4.3.

a) A botanical survey shall be required prior to development which impacts habitats identified as A-1, B-2, or B-3 on the Habitat Sensitivity Map, with the survey being conducted by a qualified botanical specialist on the entire area during the flowering season.

b) In Planning Area II (from 3rd Street to Fountain Avenue), maintain well defined trails along the bluffs with designated accessways to the water.

c) In Planning Area III (Fountain Avenue to Ocean View and Sea Palm), maintain existing trails and vegetation. Reduce erosion by directing pedestrians to designated beach access ways. Encourage native bluff plants but retain exotic plants. If iceplant die-back occurs due to parasite infestation, consider replanting with non-susceptible native or drought-resistant species rather than spraying to control insects.

d) In Planning Area IV (Sea Palm to Lighthouse Reservation) where there are a variety of habitats:

1. from Sea Palm to Esplanade, apply Policy 4(c).

2. from Esplanade west, parking area boundaries adjacent to the bluffs should be clearly defined to protect bluff vegetation and reduce erosion, and ground squirrel populations controlled by humane means. Feeding of ground squirrels should be discouraged through sign-

ing. Existing isolated bluff plant communities (B-4 on the Habitat Sensitivity Map) can be protected with barriers, and enlarged where iceplant dies back.

3. In the Lighthouse Reservation and Golf Course area, areas of extreme sensitivity (A-1 on the Habitat Sensitivity map) should be protected from further trampling by a low mesh fence. Do not allow machinery in the dune area. Apply irrigation only on turf, not on the sand. Continue to eliminate exotics and restore native dune plants on the Lighthouse Grounds. In suitable areas, plant species which will enhance the overwintering habitat of the Monarch butterfly, by providing additional nectaring and feeding sources. Protect Crespi Pond from any polluted runoff or other disturbances to its waterfowl habitat. Allow carefully controlled dredging of Crespi Pond in order to prevent loss of this important wetland through eutrophication and sedimentation as approved by the City Council upon a recommendation from the Crespi Pond Technical Advisory Committee.

e) In Planning Area V (Southern Pacific Railroad), pampas grass should be eliminated at the southwest end. Landscaping should be compatible with the type of habitat through which the railroad passes and utilize native plants where that is the predominant adjacent vegetation type. Identify and protect Monarch butterfly overwintering sites, buffer trees, nectaring and feeding areas within and adjacent to the former railroad route. Where developed for recreational trail, municipal golf course or other uses, such Monarch butterfly habitat shall first be identified by appropriate experts approved by the City. The project shall then be designed to avoid any significant disruption of the identified Monarch butterfly habitat, and where appropriate, the right-of-way shall be landscaped and permanently managed to enhance the habitat of this species.

Asilomar State Park and Conference Grounds

3. New development in the lands of Asilomar State Park and Conference Grounds shall be carefully sited and designed to protect the habitat of the rare and endangered Menzies' wallflower and Tidestrom's lupine.

The following recommendations shall be given priority in the State Department of Parks and Recreation's continued development and implementation of its General Plan for Asilomar State Beach and Conference Grounds:

a) Implement a dune restoration program, including restricting public access, in the northern portion of the Conference Grounds to protect the habitat of rare and endangered dune plants as identified on the Habitat Sensitivity Map.

b) Undertake dune stabilization programs on the central and southern dunes, including planting of native vegetation, and direct human recreation to well-defined areas.

c) Expansion or replacement of facilities in the sensitive forest-front transition zone adjacent to the sand dunes shall be restricted to the existing building envelopes or shall take place outside of the forest-front zone.

d) The native forest of Asilomar should be studied and where necessary maintained through planting of nursery stock grown from site-specific Asilomar stock.

e) On State-owned land west of Sunset Drive, parking areas should be delineated to reduce habitat damage by vehicles; dunes areas should be monitored and native plants restored and, if necessary, protected with barriers; iceplant allowed to die back where scale infested; and trails designated, with wire fencing installed where necessary to protect habitats.

f) The Majella Slough, on State property south of Sunset Drive, should be preserved and protected from human intrusion.

Point Cabrillo - Hopkins Marine Station

4. Hopkins Marine Station is encouraged to remove the exotic iceplant and to restore a native bluff plant community on the rocky outcrop area identified in the Habitat Sensitivity and Identification Study.

2.3.6 Recommended Actions

1. The City should undertake and implement a tree management program to maintain and enhance the Monterey pine and Cypress stands within the coastal zone. This program should include among other things:

- o A complete inventory of the trees within the City's coastal zone to determine the age of the trees, disease if any, and the needs for continued reforestation in the City;

- o New tree planting should be an on-going project in order to replace diseased and dead Monterey pines, Monterey cypresses and coast live oaks. Dead trees (snags) should be retained, where possible, to provide habitat for cavity-nesting birds.

2. A task force consisting of residents of Pacific Grove, members of the Pacific Grove Museum of Natural History, the California Native Plant Society, representatives from the California State Department of Parks and Recreation and the Asilomar Operating Board, should be formed for the purpose of:

-- propagating the rare and endangered plants Menzies' wallflower and Tidestrom's lupine and any others that may become endangered or rare;

-- identifying them and educating the public about rare and endangered plants; and

-- developing methods of maintaining these and other native dune plants within the Asilomar residential district, Asilomar Conference Grounds and other appropriate areas.

3. The City should encourage the retention and/or re-establishment of the native site-specific dune flora and in particular the protection of rare and endangered species. Information on propogation and care should be provided.

Further, the City should not permit maintenance or establishment of exotic species which are proven to invade or threaten native dune vegetation.

4. An overall plan for the management and restoration of dune habitat in the Asilomar dunes should be prepared in order to provide the City, property owners, and the State with consistent standards to be applied to development and access proposed in the area. This plan should contain practical guidelines and criteria for development of homes and related improvements in dune areas, and should address erosion and habitat loss resulting from public access. The City may undertake this project alone, or together with Asilomar State Park. Funding assistance from the Coastal Conservancy should be requested to support the project.

5. The City will seek expert assistance: a) to determine the location of feeding and overwintering areas for the Monarch butterfly within and functionally interdependent with the City's coastal zone (including an investigation of the abandoned railroad right-of-way); and, b) to identify appropriate development and habitat preservation standards for coastal development in such areas, to be incorporated in the City's Local Coastal Program implementation measures.

2.4 ARCHAEOLOGICAL RESOURCES

2.4.1 Background

Archaeological resources are located throughout Pacific Grove's coastal zone. An Archaeological Sensitivity Map for Pacific Grove was prepared by the California Archaeological Site Survey, Central Coast Counties Regional Office. This generalized map designates most of the coastal zone as an area where there is a likelihood of prehistoric cultural resources. The map does not distinguish between known sites and potential sites, as past experience has shown that the circulation of maps identifying specific site locations has often led to indiscriminate digging by artifact collectors and vandals. Specific information on recorded sites is available through the California Archaeological Site Survey Regional Office.

An account of the prehistory of Pacific Grove, based primarily on archaeological data, was prepared for the LUP by an archaeological consultant. The complete text of the report, entitled "A Gentle and Peaceful People - The Prehistoric Inhabitants of Pacific Grove," is on file at the City's Community Development Department.

The report indicates that virtually all new information on the original Indian inhabitants of Pacific Grove must come from archaeological excavation and research, as the living culture has been lost. A 1977 archaeological survey, conducted in connection with the Monterey-Pacific Grove regional sewer project, has revealed the existence of a previously unknown village site, estimated to be 4,000 years old. The report concludes that in some areas of the Monterey Peninsula up to 75% of all archaeological information has been irretrievably lost through site disturbance or destruction.

2.4.2 Relevant Coastal Act Policies

Section 30244 of the Coastal Act requires that any potential adverse impacts on archaeological (and paleontological) resources from new development be mitigated through reasonable measures.

2.4.3 Existing Policies and Regulations

The 1973 Open Space Element of the Pacific Grove General Plan contains a brief discussion of archaeological resources. It was assumed at the time that the General Plan

was prepared that no major archaeological sites existed in Pacific Grove and that known sites were located on publicly owned open space lands.

As part of the coastal permit process, the Coastal Commission has conditioned permits in Pacific Grove to require protection of archaeological resources. These requirements have included:

- Review of the site by a qualified professional archaeologist to determine its value,
- Resiting or redesigning the project to minimize impact on archaeological resources,
- Preparation and implementation of an archaeological mitigation plan which could include excavation or protection of the resource for future study by covering with fill.

The following recommendations include policies and procedures necessary to carry out the requirements of Section 30244 of the Coastal Act.

2.4.4 General Policies

1. The City shall ensure the protection, preservation, and proper disposition of archaeological resources within the coastal zone.

2. The City shall assist developers and landowners by providing early identification of sensitive sites so that archaeological resources can be considered and protected during the early phases of project design.

2.4.5 Specific Policies

1. Prior to the issuance of any permit for development or the commencement of any project within the areas designated on Figure 3, the Archaeological Sensitivity Map, the City in cooperation with the State Historic Preservation Office and the Archaeological Regional Research Center, shall:

a) Inspect the surface of the site and evaluate site records to determine the extent of the known resources.

b) Require that all sites with potential resources likely to be disturbed by the proposed project be analyzed by a qualified archaeologist with local expertise.

c) Require that a mitigation plan, adequate to protect the resource and prepared by a qualified archaeologist be submitted for review and, if approved, implemented as part of the project.

2.5 SCENIC RESOURCES

2.5.1 Background

Nearly continuous unobstructed views of the sea are possible along the Pacific Grove shoreline. Few structures exist seaward of Ocean View Boulevard, or Sunset Drive.

The inland side of Ocean View Boulevard, east of Asilomar Avenue, is essentially "built out," and has assumed a residential character. West of Asilomar Avenue, the inland view from Ocean View Boulevard is predominantly open space consisting of a golf course at Lighthouse Reservation. The few structures (Naval and Coast Guard facilities) are situated some distance from Ocean View Boulevard, and are visually subordinate to the Point Pinos Lighthouse.

South of Lighthouse Reservation, the Asilomar Dunes area has been substantially developed with single-family residential dwellings. However, not all the Asilomar Dunes area lots have been developed, and the remaining vacant lands serve to soften the contrast between existing development and the expansive open space seaward of Sunset Drive.

From coastal zone roads inland of Ocean View Boulevard and Sunset Drive, unobstructed bay/ocean views are available at the locations shown on Figure 5, Shoreline Access. Retention of these views to the maximum extent possible is of major importance, because of the visual access to coastal waters they provide.

Working Paper #1 on Access and Natural Resources (October 1980) provides a more detailed discussion of coastal zone visual resources.

2.5.2 Relevant Coastal Act Policies

Coastal Act Section 30251 addresses visual access. Coastal area scenic and visual qualities are to be protected as resources of public importance. Development is required to be sited to protect views, to minimize natural landform alteration, and to be visually compatible with the character of surrounding areas. Where feasible, visual quality in visually degraded areas is to be restored and enhanced.

2.5.3 Existing Policies and Regulations

An objective of Pacific Grove's General Plan is "to protect and preserve open space lands from the encroachment of sprawling urban development." The Open Space and Conservation Plan states that the City's open spaces include "passive recreational areas and scenic lands which provide visual amenities for residents and visitors." The General Plan designates all shorefront lands for open space, except for a visitor-commercial area adjacent to Monterey and a "rural" residential designation on privately-owned property seaward of Sunset Drive. The City's Open Space and Conservation Plan designates the latter properties as "unincorporated lands recommended for open-space," and recommends: "... that Asilomar State Park and the coastline be preserved as open space areas." It also recommends that "no new permanent structure, except which is necessary for public health and safety, be erected seaward of Ocean View Boulevard and Sunset Drive from Asilomar Avenue to the southern boundary of the Planning Area."

The Resource Management Plan/General Development Plan and the Dunes Restoration Plan for Asilomar State Beach and Conference Grounds does not propose any development adjacent to Sunset Drive, with the exception of boardwalks through the dunes and pedestrian control fencing to direct visitors to designated accessways.

The policies that follow supplement and strengthen existing policies and regulations by providing for:

- Designation of "scenic areas;"
- Policies controlling the design and siting of structures within scenic areas;
- Preservation of coastal views from inland locations; and
- The encouragement of public acquisition of vacant private parcels seaward of Sunset Drive.

2.5.4 General Policies

1. It is the policy of the City of Pacific Grove to consider and protect the visual quality of scenic areas as a resource of public importance. The portion of Pacific Grove's coastal zone designated scenic includes: all areas seaward of Ocean View Boulevard and Sunset Drive, Lighthouse

Reservation lands, Asilomar Conference Ground dune lands visible from Sunset Drive, lands fronting on the east side of Sunset Drive; and the forest-front zone between Asilomar Avenue and the crest of the high dune (from the north side of the Pico Avenue intersection to Sinex Avenue).

2. Within these scenic areas, permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural landforms, to be visually compatible with the open space character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas.

3. Development standards for scenic areas shall minimize land coverage, grading, and structure height, and provide for maximum setbacks from adjacent public open space areas.

2.5.5 Specific Policies

1. New development, to the maximum extent feasible, shall not interfere with public views of the ocean and bay.

2. New development at Lover's Point, the Hopkins Marine Lab property, and the Lighthouse Reservation lands shall be minimized, and shall conform to the overall scale and character of existing development at these locations.

3. New development including boardwalks within the Asilomar Conference Grounds, visible from Sunset Drive, shall be subordinate to the open space character of the area.

4. New development on parcels fronting on Sunset Drive shall compliment the open space character of the area. Design review of all new development shall be required. The following standards shall apply;

a) Minimum building setbacks of 75 feet from Sunset Drive shall be maintained. Larger setbacks are encouraged if consistent with habitat protection.

b) Residential structures shall be single story in height and shall maintain a low profile complimenting natural dune topography. In no case shall the maximum height exceed 18 ft. above natural grade within the foundation perimeter prior to grading.

c) Structures shall be sited to minimize alteration of natural dune topography. Restoration of disturbed

dunes is mandatory as an element in the siting, design and construction of a proposed structure.

d) Earthtone color schemes shall be utilized, and other design features incorporated that assist in subordinating the structure to the natural setting.

5. Landscape approval shall be required for any project affecting landforms and landscaping. A landscaping plan, which indicates locations and types of proposed plantings, shall be approved by the Architectural Review Board. Planting which would block significant public views shall not be approved.

6. Undergrounding of utilities is currently required in multiple-family and commercial districts. Utilities serving new single-family construction in scenic areas shall be placed underground. This shall include new electrical service or remodeling greater than 25% of the replacement value of the structure.

7. It is the City's special objective to retain the maximum amount of open space possible on lands seaward of Ocean View Boulevard and Sunset Drive. In these major public viewing areas, the City shall seek assistance in securing scenic conservation easements, and a reduction of development potential through public acquisition of vacant private parcels.

8. New development within the scenic forest-front area along Asilomar Avenue shall be designed to minimize loss of native Monterey pine and oak forest, and to retain public views towards the inland face of the high dunes.

9. To protect the scenic forest-front zone along Asilomar Avenue southwards from the Pico Avenue intersection, the City will support appropriate measures to preserve vacant parcels, and divisible portions of large parcels, through acquisition, dedication of scenic conservation easements or other appropriate measures which would protect public views without loss of environmentally sensitive habitat.

COASTAL ZONE LAND USE AND DEVELOPMENT

3. COASTAL ZONE LAND USE AND DEVELOPMENT

3.1 INTRODUCTION

Pacific Grove is an old city with a special heritage. Land use patterns throughout most of the city are well established. Little vacant land remains. In many ways, Pacific Grove's development has been exemplary. It is widely known as one of the most pleasant and livable communities on the California coast. Very early, the city set aside most of its shoreline as permanent open space for public recreational use and enjoyment. Older neighborhoods, especially the original Pacific Grove Retreat, have been carefully preserved by the community for their historical interest, architectural values and the charm they give to the city as a whole.

Challenges that lie ahead for the city include ensuring that the shoreline areas always remain open for public use, and that adequate recreational support facilities are provided. Management of infilling within the Retreat area, and control of redevelopment of old structures will also be an increasingly difficult challenge in the years ahead.

With the annexation of the Asilomar Dunes area in 1980, the City assumed new land use planning responsibilities. Nearly half of the residential parcels in this area are undeveloped. Their location, in a scenic coastal area, and on sand dunes supporting several rare and endangered plants, makes careful control of future development critical.

These land use planning issues are specifically addressed by the Coastal Act. The sections that follow provide more detailed background, and set forth policies that support and strengthen existing City regulations in these areas. Figure 4, the Coastal Zone Land Use Plan, supports the policies and illustrates the general kinds, locations and intensities of uses to be permitted within the City's coastal zone. The land use policies that follow and Land Use Plan Map are, with only limited exceptions, a direct reflection of existing development and present City regulations.

3.1.1 Regulation of Development in Coastal Zone

1. All new development shall be consistent with the land use designations and other requirements of the certified Land Use Plan, including the certified Land Use map (Fig. 4). Residential densities shall not exceed those specified on the Land Use map, and may in specific instances be reduced by application of the Land Use Plan policies.

2. New buildings shall be limited to two stories (25 ft.) in height unless otherwise specified by this Plan. In Land Use Plan Areas I and III, the limit will vary but in no case shall it be more than three stories (40 ft.). Building height shall be measured as the distance above natural grade within the foundation perimeter, prior to grading or other development.

3. For all types of structural development, adequate parking spaces shall be provided, proportionate to expected use. Such parking shall generally be provided on-site, although off-site parking may be considered where necessary to save historic structures or where adequate assessments are made for provision of close-by off-site parking facilities. For the following classes of development, the minimum number of spaces shall be:

a. For motels and bed-and-breakfast projects, one space per unit;

b. For each family unit in a multi-unit residential structure, one and one-half spaces per unit for units of one or less bedrooms; two spaces per unit otherwise;

c. For all other residential units, two spaces per unit; and,

d. For restaurants, professional offices and commercial developments, one space per 300 square feet of floor area.

4. The scenic native forest within Asilomar Conference Grounds, along Asilomar Avenue, and within the abandoned railroad right-of-way, shall to the maximum feasible degree, be retained, consistent with the uses allowed by this Plan. Landscape trees which contribute to the scenic views elsewhere in the City's coastal zone shall be protected, or when necessary, replanted. All tree removal shall be in accordance with the City's existing tree protection requirements (City Ordinances Chapter 12.16, included as

Appendix B).

5. This section shall be implemented through adoption of appropriate zoning ordinances, which will specify the procedures and standards for carrying out each chapter of this Plan, and will require that a coastal development permit be required for new development within the City's coastal zone jurisdiction.

3.1.2 Federal Lands

1. The Lighthouse Reservation area, shown as Area IV-B on the Land Use map, is owned by the U. S. Government. The Naval Reserve Center, Point Pinos Lighthouse and Coast Guard installation presently operate here. The balance of the Lighthouse Reservation is operated by the City for public park purposes, pursuant to a special agreement with the U. S. Coast Guard.

2. Federal agencies are not subject to the permit jurisdictions of either the city or the Coastal Commission, but are subject to the federal consistency process provided by the federal Coastal Zone Management Act of 1972 (CZMA). Non-federal development on these federal lands will be potentially subject to both the federal consistency process under CZMA, and the Coastal Commission's permit jurisdiction.

3.2 SPECIAL COMMUNITIES

3.2.1 Background

The portion of the Pacific Grove Retreat which is located in the coastal zone meets the definition of a "special community" under Section 30253 of the Coastal Act.

The unique architectural and visual character of the Retreat are due to its historic origins as a 19th century coastal Methodist retreat -- the only such relatively intact community remaining on the Pacific Coast.

An outstanding feature of the Pacific Grove Retreat is the number and concentration of late 19th and early 20th century structures that have survived. Over half of the 385 residential structures in the coastal zone portion of the Retreat are identified in the City's Historic Resources inventory. The area between Pacific Street and Grand Avenue is particularly rich in historic buildings.

Current land use in the coastal zone portion of the Retreat is predominantly residential, with approximately 72% of the residential structures in single-family occupancy. Multiple dwelling units are concentrated near the commercial center on Lighthouse Avenue and along Ocean View Boulevard.

Interspersed among the streets of historic homes are several small parks -- Caledonia, Greenwood, Jewell, and Andy Jacobsen. The scale, vegetation and physical features of the parks make a distinctive contribution to the total composition of the Pacific Grove Retreat.

At Asilomar State Beach and Conference Grounds, historic architectural resources are found in the eleven buildings designed by pioneer California woman architect Julia Morgan. Asilomar, along with San Simeon, is considered one of the finest concentrations of Julia Morgan structures in California.

A more detailed discussion of special community issues is contained in Working Paper #2 on Development Issues (November 1980). Refer also to the City of Pacific Grove Historic Inventory (1978), on file at the City's Community Development Department, which lists the address, date of construction and the first owners of the historic structure.

3.2.2 Relevant Coastal Act Policies

Two Coastal Act policies address protection of special communities. Section 30253(5) requires that the unique characteristics of special communities and neighborhoods be protected and Section 30251 provides that scenic and visual qualities of coastal areas are a resource of public importance which deserve protection from incompatible new development.

3.2.3 Existing Policies and Regulations

Steps have been taken by the City to protect the Retreat. Among these are: the preparation of a Historic Resources Inventory, a Historic Preservation Plan, the requirement that all exterior modifications be reviewed by the Architectural Review Board, revised zoning for the Pacific Grove Retreat, formulation of Design Criteria, and control over demolition of historic structures. In addition, the City uses the Historic Building Code for improvements to older structures as required by State law.

With respect to natural features, the Pacific Grove General Plan recognizes the trees of Pacific Grove as "major natural resources." Ordinances regulating tree removal from public and private property are in place.

Although the Morgan structures are architecturally significant, they are not officially recognized or designated as California Registered Historical Landmarks. The Julia Morgan buildings at Asilomar and the land between them have been designated as a National Landmark District which is the highest level of recognition for a cultural resource in the United States. The State Public Resources Code (5024.5) requires that any proposed alteration of the buildings or surrounding area follow guidelines and review processes administered by the State Office of Historic Preservation.

The following policies on special communities extend and strengthen existing protective measures. The policies are intended to give explicit recognition to the Pacific Grove Retreat and the Morgan structures, to give clear status to the City's Design Criteria, to add further protection against demolition of historic buildings, and to promote a range of historic preservation methods.

3.2.4 General Policies

1. The Pacific Grove Retreat's unique characteristic and architectural heritage contribute to the aesthetic, social and economic well-being of the community, both for residents and visitors. The City shall encourage the protection, maintenance and enhancement of the unique historical, architectural, and visual characteristics of the Retreat.

2. All proposed development actions, including City public works projects, shall be consistent with maintaining the current scale and character of the Retreat.

3. Other historic and/or architecturally unique structures, such as the Julia Morgan structures at Asilomar State Park, shall be protected and maintained to the fullest extent possible.

3.2.5 Specific Policies

Pacific Grove Retreat

1. Rehabilitation, reconstruction, remodeling, or exterior modification of existing structures with historic or architectural significance shall relate to, or reconstruct the

lines of the original design as much as possible.

2. Design review shall be required through coastal development permit procedures in order to maintain historical continuity and visual harmony of new development within the Retreat area.

3. In order to protect landmark structures, unwarranted demolition will be avoided by implementing standards for demolition permits. In addition demolition permits should be treated as discretionary permits in order to strengthen City control. Potential landmark structures in the coastal zone of the Retreat include, but are not limited to, all structures constructed at least 60 years ago.

4. Local initiative, through a well-informed and committed citizenry, is an essential ingredient in achieving protection of historic resources. The City shall therefore continue its ongoing programs of citizen involvement in carrying out its historic preservation policies and programs.

5. In refining the list of desirable and adaptable trees for planting in the Retreat, the City will encourage native, drought resistant vegetation and species compatible with the scale and character of current vegetation.

Asilomar State Park

6. In order to preserve structures designed by Julia Morgan at Asilomar State Park, the City shall require design review prior to any proposed exterior alterations. Alterations shall relate to or reconstruct the lines of the original design to the maximum extent possible.

Pacific Grove Beach

7. The City will maintain the Pacific Grove Beach Tract as an architecturally unique neighborhood with a village-like setting.

3.2.6 Recommended Actions

1. The City should maintain and update the Historic Resources Inventory to provide a current description of the historic and visual character of the Retreat. The help of organizations such as the Heritage Society should be solicited.

2. The Pacific Grove Retreat Zone District should be revised in the coastal zone to limit the scale of permitted multiple dwellings in order to maintain the existing scale of residential structures within the Retreat.

3. The City should develop programs and techniques to assist property owners in maintenance of structures in the Retreat in good repair in order to retard physical deterioration. Possible approaches will include code enforcement, award programs, rehabilitation programs, and use of the State Historic Building Code.

4. The City should consider adoption of a specific and complete historic district ordinance for the Retreat area, including the designation of individual meritorious structures and procedures to prevent demolition of such structures to the maximum extent feasible.

5. The City should endeavor to carry out the Tree Management Program as proposed in the adopted Conservation Element of the General Plan.

6. The California State Department of Parks and Recreation should amend its General Development Plan for Asilomar State Park to explicitly recognize, maintain and preserve the Julia Morgan structures as a cultural resource of statewide significance. The City should cooperate with the Department in any research directed toward acquiring further historical information on the design and construction of the Morgan buildings, as well as original site plans and landscaping data.

3.3 PRIORITY USES: RECREATION, VISITOR-SERVING FACILITIES AND COASTAL-DEPENDENT USES

3.3.1 Background

Priority uses, as defined by the Coastal Act, include recreation and visitor-serving and coastal-dependent uses. Coastal-dependent uses in Pacific Grove include the Hopkins Marine Lab facilities at Point Cabrillo, Coast Guard and Naval facilities at Pt. Pinos, and the Monterey Bay Aquarium (partially within City limits).

Priority uses that provide for recreation and visitor-serving opportunities for both Pacific Grove residents and visitors are numerous within the City's coastal zone, and are available to a broad economic range of users. The shoreline parks, trail network and parking areas make it possible for pedestrians and motorists to enjoy nearly the entire length of the coastal zone, from Cannery Row to the southern limits of Asilomar State Beach. At several points, direct access to beaches is available by stairways or paths. The abundant life of Monterey Bay's waters attracts numerous skin divers; the Monterey Bay Aquarium provides many other visitors to the City's coastal zone the opportunity to observe much of the same marine life.

Development of the Southern Pacific Railroad right-of-way as a continuous trail from the Aquarium area to Lover's Point, and designation of a continuous bike route along Ocean View Boulevard has been recently completed. The portion of the Southern Pacific right-of-way which extends from Lover's Point to the boundary of Del Monte Forest is also being considered for acquisition and development of a recreational trail. An interpretive signing program at popular visitor destinations within Pacific Grove's coastal zone could further enhance the visitor's shoreline experience.

Concentrations of visitor-oriented commercial facilities within the coastal zone are located at Lover's Point and near Cannery Row. In addition to overnight accommodations and dining facilities available at the Asilomar Conference Grounds, there are four privately-operated motels, and a half dozen restaurants. Other existing recreation and visitor-serving facilities include the municipal golf course and the Lighthouse Museum at Lighthouse Reservation.

Working Paper #1 on Access and Natural Resources (October 1980) and the section on existing recreational resources and visitor-serving facilities in the LCP Special Committee's Proposed Local Coastal Plan (June 1984) provide a more detailed discussion of recreation and visitor-serving and coastal-dependent uses.

3.3.2 Relevant Coastal Act Policies

Coastal Act policies relating to priority uses require that coastal zone waters and oceanfront land suitable for recreational use be protected for recreational use and development, that visitor-serving and commercial recreational facilities are given priority on suitable private lands over private residential, general industrial, or general commercial development (but not over agriculture or coastal-dependent industry), and that upland areas necessary to support coastal recreational uses be reserved, where feasible, for such uses (Sections 30220-30223). Coastal-dependent uses are further given preference by Section 30254. The Coastal Act also requires that lower cost visitor and recreational facilities be protected, encouraged and, where feasible, provided, and gives preference to development providing public recreational opportunities (Section 30213). Additional policies address the location and amount of recreation/public facilities development to mitigate against the impacts of overcrowding or overuse (Sections 30212.5, 30250(c) and 30252(6)).

3.3.3 Existing Policies and Regulations

Existing priority land uses within Pacific Grove's coastal zone are designated for such uses by the City's General Plan, with a few exceptions. Visitor accommodations at Jewell and Asilomar Avenues and visitor accommodations and the adjacent restaurant on Sunset Drive across from the Asilomar Conference Grounds are designated, respectively, medium residential and general commercial. The coastal-dependent educational uses at the Hopkins Marine Lab property are designated for visitor-commercial uses. The privately owned lands seaward of Sunset Drive (near Lighthouse Avenue) are designated "rural" residential in the General Plan, but are shown in the 1975 Open Space and Conservation Plan as "unincorporated lands recommended for open-space."

The policies that follow supplement and strengthen existing policies and regulations by providing for:

- Reservation of specific areas for recreational uses, visitor accommodations, visitor-commercial and coastal-dependent uses;
- Development of implementation procedures to give priority to visitor-oriented uses over general commercial uses; and
- Improved and new visitor-serving facilities (parking areas, bike route and parking racks, visitor-information /interpretive sign program, and railroad right-of-way recreational trail).

- The City recognizes the desirability of a proposed extension to the recreation trail along the abandoned Southern Pacific right-of-way. The City will work jointly with the Monterey Peninsula Park District to pursue this project.

3.3.4 General Policies

1. Protection of sensitive habitats, natural landforms and scenic resources shall be major considerations in planning for recreation and visitor-serving facilities.

2. The following coastal zone areas or facilities shall be reserved for visitor-serving uses and are designated "V-A" (Visitor Accommodations) or "V-C" (Visitor Commercial) on the LCP Land Use Plan map:

- All existing visitor accommodations and restaurants,
- Vacant parcel adjacent to Chase Park,
- Areas inland of Ocean View Boulevard between Dewey Avenue and the City's eastern limits.

Principal permitted uses for areas designated "Visitor Accommodations" include:

a) overnight lodging facilities and limited appurtenant public restaurants and shops where appropriate.

Principal permitted uses for areas reserved for "Visitor-Commercial" facilities include:

a) Visitor accommodations,
b) Food and drink establishments,
c) Visitor-oriented retail commercial activities such as: sporting and photographic equipment sales and rentals, gift and curio shops, art galleries, craft and antique sales, grocery stores.
d) Public parking facilities

Secondary or conditional uses for this land use designation include:

a) Public parking facility in conjunction with residential use not to exceed 20 units per acre (or up to 30 units per acre if density bonus is granted by City to provide housing for lower income households), if at least one public parking space per housing unit is provided. Such public parking shall be dedicated to visitor use only, shall be conspicuously signed, and shall be rigorously enforced. This public parking requirement is in addition to any parking requirements that would be

ordinarily required for such housing units.

3. The following coastal zone areas or facilities shall be reserved for recreation uses and are designated "OS-R" (Open Space Recreational) on the LCP Land Use Plan map:

- All lands north of Ocean View Boulevard (except Hopkins Marine Station and Monterey Bay Aquarium which are designated Open Space-Institutional) and west of Sunset Drive (with the exception of several residential parcels west of Jewell Avenue which shall retain a residential designation),
- All city parks,
- Golf course at Lighthouse Reservation,
- Abandoned railroad right-of-way between Ocean View Boulevard and City Limits at Spanish Bay (except for easterly spur between Crocker Avenue and Sunset Drive; this easterly spur is an area of deferred certification).

Use of these open space areas shall be limited to low-intensity day-use recreational and educational activities such as walking, nature study, photography and scenic viewing, and access to the water for diving, boating, fishing, and swimming. Within the municipal golf course, continued use as a public golfing facility will be permitted. Bicycling shall be allowed on designated bike lanes, bike paths, and areas open to other vehicles.

4. The Asilomar Conference Grounds, the shorefront lands east of 3rd Street, and existing City, Navy and Coast Guard structural facilities at Lighthouse Reservation are designated "OS-I" (Open Space-Institutional) on the LCP plan map. Principal permitted uses in these areas include the following:

a) Asilomar Conference Grounds: overnight accommodations, conference facilities, and low-intensity coastal-related recreation to the extent compatible with maximum protection of designated natural and biotic resource areas.

b) Hopkins Marine Station: coastal-dependent marine research and educational activities, aquaculture, and coastal-dependent recreation that is compatible with maintenance of coastal-dependent scientific and educational uses.

c) Monterey Bay Aquarium: coastal-dependent marine research, educational and recreational activities and facilities, and aquaculture.

d) Lighthouse Reservation: existing coastal-related institutional and military structures, and low-intensity

coastal-related recreation compatible with protection of designated natural and biotic resources, including Crespi Pond, sand dunes and existing stands of Monterey pines.

3.3.5 Specific Policies

1. Standards for new development on visitor serving parcels in the Asilomar dunes area designated for Visitor Accommodations shall be:

a) Maximum density for motel or hotel development shall be one unit per 2500 square feet of land.

b) Aggregate building coverage for parcels designated for visitor accommodations shall not exceed 50%.

c) Maximum height limits for parcels designated for visitor-serving uses shall not exceed 25 feet nor two stories above grade and 15 feet for accessory structures. The height shall be one story above grade and not more than 18 feet where the subject property or any portion thereof is zoned R-3-M (Multi-Family Residential-Motel-Adult Community district) and is within 200 feet of any portion of any property zoned R-1, R-H, or R-2 (Single-Family Dwelling, Duplex districts).

d) A minimum setback of 20 feet shall be required for parcels designated for visitor serving uses if the subject property abuts R-1, R-H, or R-2 property, including streets abutting same. The setback shall be 10 feet for property abutting commercial or other R-3-M developments or Districts.

e) All visitor accommodation units shall be for transient use only. Occupancy of such units shall be for a period not to exceed 30 days.

2. For all other areas designated Visitor Accommodation, standards for new development shall be the same as in Section 3.3.5.1(a), (b), and (e) above. Height limits shall be as specified in Section 3.1.1.2.

3. Conditions for new development on parcels designated for Visitor Commercial uses shall be determined by the City Planning Commission at the time a use permit is considered. At the minimum, such conditions shall apply the same density, site coverage, height, parking, setback and occupancy criteria as are applied to parcels designated for Visitor Accommodations. Special requirements for provision of public parking shall apply as specified in Section 3.3.4.2 above, if uses other than visitor-serving development are approved for the site.

3.4 ENVIRONMENTALLY SENSITIVE HABITATS AND SCENIC AREAS

3.4.1 Background

The Asilomar Dunes residential area, bounded by Lighthouse Avenue, Asilomar Avenue, and Asilomar State Beach/Conference Grounds, is a highly scenic area of public importance, as well as the location of sand dunes supporting rare and endangered plants. These resource values are described more fully in Sections 2.3 and 2.5.7 of this plan. The area, which was annexed by the City in 1980, was previously subdivided into residential parcels. Approximately two thirds of the existing parcels are developed, and one third remains vacant.

Issues affecting land use planning in this area therefore relate to protection of both the existing scenic qualities of the area and the sand dune habitat of the rare and endangered plants. The retention of these resources will be affected by the siting and design of new homes and related facilities, and also by the total amount of additional residential development that is permitted.

Environmentally sensitive habitats are located in other areas of the City's coastal zone as well. These include tidepools, riparian and sand dune habitats within Asilomar State Beach/Conference Grounds; the Crespi Pond wetland, tidepools and dune habitats within the Lighthouse Reservation; the City's tidelands, included in the seaward portion of the Pacific Grove Marine Gardens Park; and any areas which may be determined as essential habitat for Monarch or Smith's blue butterflies. See applicable development policies in Sections 2.2 and 2.3 of this Plan.

3.4.2 Relevant Coastal Act Policies

Coastal Act section 30251 requires that the scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

Section 30240(a) and (b) addresses environmentally sensitive habitat areas by requiring that they be protected against any significant disruption of habitat values, and only uses

dependent on such resources shall be allowed within such areas. Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

3.4.3 Existing Policies and Regulations

Land use regulations presently in effect for the Asilomar Dunes area permit residential uses with a minimum parcel size of 20,000 square feet. The City controls the siting of all improvements on the property and controls maximum lot coverage. Lot coverage of up to 40% of the parcel is permitted by current zoning. In addition, the City can impose mandatory conditions pertaining to resource protection. Easements have been requested by the City, in some instances, to help protect dune and plant habitat.

Development of a single residence on each existing vacant parcel will result in approximately 34 additional units. If eligible properties are further subdivided at current zoning minimum, an additional 25 to 30 residential lots could result. There are about 70 residences in the area now. Future development at half-acre densities can be expected to roughly double the existing number of residences in the area. If auxiliary units, such as guest houses, or mother-in-law units are permitted, then total buildout can be expected to be much higher.

The policies that follow support residential development in Asilomar Dunes. Lot coverage is reduced for new development, and minimum lot sizes are increased in some areas in order to control overall development to a level consistent with Coastal Act requirements concerning protection of scenic resources and environmentally sensitive habitats.

3.4.4 General Policies

1. All new development in the Asilomar Dunes area shall be controlled as necessary to ensure protection of coastal scenic values and maximum possible preservation of sand dunes and the habitat of rare and endangered plants.

2. The Asilomar Dunes neighborhood shall be maintained as a low density residential area. The principal permitted use is single-family residences. In order to maintain low densities necessary to protect coastal scenic and habitat resources, auxiliary housing units, or guest units shall not be permitted. Freestanding permanent commercial signs are prohibited in this area.

3. New subdivisions which create commitment to development within, or immediately adjacent to environmentally sensitive habitat areas shall be allowed only at densities compatible with protection and maintenance of these resources. New subdivisions may be approved only where potential adverse impacts to environmentally sensitive habitats can be prevented. No residential subdivision shall be allowed unless it is first demonstrated that, for each new residential lot, normal residential development, including driveway and utility connections, is feasible without damage to any environmentally sensitive habitat.

Contiguous areas of undisturbed land in open space uses shall be maintained wherever possible to protect environmentally sensitive habitat areas and associated wildlife values. To this end, development of parcels adjacent to environmentally sensitive habitat areas shall be planned to keep development intensity immediately adjacent to the sensitive habitats as low as possible, consistent with other planning criteria (e.g., drainage design, roadway design, and public safety).

3.4.5 Specific Policies

1. Minimum parcel size for new land divisions are one-half acre properties fronting on Asilomar Avenue north of Pico Avenue, and one acre for other areas of Asilomar Dunes or lots of record.

2. Maximum aggregate lot coverage for new development shall be 15% of the total lot area. For purposes of calculating lot coverage under this policy, residential buildings, driveways, patios, decks (except decks designed not to interfere with passage of water and light to dune surface below) and any othe features which eliminate potential native plant habitat will be counted. However, a driveway area up to 12 feet in width the length of the front setback shall not be considered as coverage if surfaced by a material approved by the Site Plan Review Committee. An additional 5% may be used for immediate outdoor living space, if left in a natural condition, or landscaped so as to avoid impervious surfaces, and need not be included in the conservation easement required by Section 2.3.5.1(e). Buried features, such as septic systems and utility connections which are consistent with the restoration and maintenance of native plant habitats, need not be counted as coverage.

The siting of each new development and the expected area of disturbance around each residence shall be individually reviewed by the Site Plan Review Committee. Such review shall duly consider the minimization of dune destabilization and disturbance to endangered plants and their habitat.

In special cases, up to 20% aggregate lot coverage may be allowed as a conditional use if the City specifically finds that:

a) An offsetting area of native dune plant habitat will be restored and maintained adjacent to the site, such that the total area which will be preserved, restored and permanently maintained under conservation easement or similar enforceable legal instrument, as provided in Section 2.3.5.1, is equal to at least 80% of the total area of applicant's lot; and,

b) the additional site coverage is essential for protecting public views (i.e., by maximizing front setback in the case of parcels facing Sunset Drive), or for avoiding hardships in the case of existing parcels of one-half acre or less which would otherwise suffer in comparison to adjacent similarly-sized developed parcels.

3. In the event a dwelling is destroyed by fire or other natural causes, the dwelling would be allowed to be rebuilt as it existed prior to the destruction if less than 75% were destroyed.

4. It is the City's objective that vacant private parcels west of Jewell Avenue on the seaward side of Sunset Drive be permanently maintained as open space in recognition of the area's dune habitat values, scenic qualities, and in order to preserve public visual access to the ocean.

Permanent open space may be achieved through dedication of scenic conservation easements by the property owners, or by acquisition of fee title or development rights by the City, another governmental entity, or by a private foundation. The City encourages assistance from the State or suitable foundation in the acquisition of these important parcels.

In the event of an application for a coastal development permit to construct residences or other structures on these vacant parcels, the City shall seek funding assistance or other remedies to permanently establish the parcels as public open space. If after a reasonable time period no remedy has been found, the City shall consider the development application under the standards established in Sections 3.4.4 and 3.4.5 for areas inland of Sunset Drive, and shall also require other measures as necessary to avoid impacts to the scenic character of the area.

5. In order to preserve scenic values, remnant native pine forest, and environmentally sensitive dune habitat on private parcels along the seaward side of Asilomar Avenue, from the vicinity of the Pico Avenue intersection southwards to the Asilomar Conference Grounds, the City will support

preservation efforts on the remaining vacant parcels in this area in the same manner as provided for the vacant parcels seaward of Sunset Drive.

3.4.6 Recommended Actions

1. The City shall adopt implementing ordinances necessary to carry out the policies of this section.

2. Seek funds to purchase vacant parcels identified in Sections 3.4.5.4 and 3.4.5.5, above, for preservation as permanent open space.

3.5 OTHER COASTAL ZONE USES

3.5.1 Policies

1. The abandoned railroad right-of-way between Ocean View Boulevard and the easterly City Limits at Cannery Row is designated as "Recreational Trail." The principal permitted use in this area is the Monterey Peninsula Recreation Trail, which supports both a paved bicycle path and parallel pedestrian path.

2. The locations and development intensities for residential and mobile home park uses shall be as shown on the land use map (Land Use Plan Figure 4), subject to the limitations specified in the Land Use Plan text for the Asilomar Dunes area and the Pacific Grove Retreat neighborhood. Principal permitted uses include single family residences, scenic and natural habitat reserves in the Asilomar Dunes area; mobile homes within the Mobile Home Park Special Zone; and elsewhere, single family homes, multi-family units, guest units, auxiliary (senior) housing units, and bed-and-breakfast facilities, at the prescribed densities.

3. The Professional land use category is limited to a single block of the City's coastal zone. The principal permitted use shall be professional office space consistent with existing development patterns. Provision of public parking facilities shall also be considered a permitted use in this area.

4. The Commercial land use category within the City's coastal zone is limited to the area between the two branches of the abandoned railroad right-of-way at Sunset Drive. The principal permitted use shall be retail commercial use consistent with existing development patterns. Provision of public parking facilities shall also be considered a permitted use in this area.

PUBLIC FACILITIES

4.0 PUBLIC FACILITIES

4.1 WATER SUPPLY

4.1.1 Background

Pacific Grove's potable water is supplied by California-American Water Company (Cal/Am), a privately-owned utility. The water supply available to serve new development is subject to regulation by the Monterey Peninsula Water Management District (MPWMD). In 1980, the MPWMD adopted an allocation system assuring each municipal unit within the Cal/Am service area its "fair share" of Cal/Am water. The allocation was revised in 1981 and 1987. The latest amendment to the allocation, made in January 1987, was the result of an audit of water users by Cal/Am Water Co. which showed that some Pacific Grove water users were being counted as part of another jurisdiction.

Cal/Am system capacity (water available for distribution) is presently estimated to be 20,000 acre-feet/year (AFY). Under the current MPWMD allocation system, 18,600 acre-feet are allocated annually, of which Pacific Grove is entitled to 2,359.38 acre-feet. The City's current (March 1986-February 1987) water use according to metered sales is 2,121.05 acre-feet. The additional water supply available to the City under the present MPWMD allocation system on March 1, 1987 was therefore approximately 179.54 acre-feet (2,359.38 acre-feet total allocation less 2121.05 acre-feet used + 58.79 acre-feet projected demand which includes current use plus committed water.)

The City of Pacific Grove, in response to a worsening water supply situation, adopted a City-wide allocation in April, 1986 designating a water allocation to five broad categories of land use as shown in the following table.

TABLE I

CITY OF PACIFIC GROVE ALLOCATION OF POTABLE WATER
March 1, 1987

Category of Use	Water Allocation	Water Committed	Water Available
Single-family Residential	50.00	14.66	35.34
Multi-family Residential *	44.00	14.81	29.19
Commercial and Industrial	29.27	27.21	2.06
Public Authority	16.23	1.00	15.23
Unallocated Reserve	15.50	0.00	15.50
Totals	155.00	57.68	97.32

* Includes duplex, three or more units, and auxiliary units.

The City's internal water allocation is based on the availability of 155 acre-feet. Monthly water use figures provided to Pacific Grove since last October by Cal-Am Water Co. and the MPWMD show that water usage fluctuates monthly throughout the year.

Table 2, prepared in April , 1981 by the Coastal Commission staff, shows estimated 1980 water usage within the Coastal Zone, as well as usage projected for "buildout" under this plan. The figures for the amount of projected water usage increases which would occur in areas with LCP "priority use" designations have been adjusted to reflect the impact of the adoption of Initiative Measure "C" adopted in 1986.

To ensure that unanticipated water demands will not preclude coastal priority uses, LCP policy support is needed for mandatory conservation, and reduction of development to avoid excessive water use. For example, significant amounts of water are presently used for irrigation of open space areas (parks, golf course). One way in which it may be possible to reduce this usage would be to capture storm water for irrigation purposes, as was done during the 1977-78 drought.

For a more detailed discussion on Pacific Grove's water supply, see Working Paper #2 on Development Issues (November 1980) and the City's files on the development of the April, 1986 city-wide water allocation.

TABLE 2

PACIFIC GROVE COASTAL ZONE CURRENT AND PROJECTED WATER USAGE
CONSUMPTION IN ACRE-FEET/YEAR (AFY)

PLANNING AREA	1980 USAGE	BUILD-OUT USAGE	TOTAL INCREASE	PRIORITY DISTRICTS' INCREASE
I	30.9	87.4	56.5	12.5
II	165.6	179.4	13.8	0.0
III	79.5	87.6	8.1	4.6
IV	56.7	56.7	0	0.0
V	N/A	N/A	N/A	N/A
VI	118.9	176.5	57.6	6.3
TOTALS	451.6	587.6	136.0	23.4

Table 2 shows that of the 136.0 AFY projected demand for the City's coastal zone development, 23.4 AFY would be needed for development in areas designated in the LCP for Coastal Act priority uses. This 23.4 AFY, which is primarily for visitor commercial uses, exceed by 21.3 acre-feet the remaining water allocation available for all commercial uses within the City under the City's allocation system as of March 1, 1987.

4.1.2 Relevant Coastal Act Policies

Coastal Act Section 30254 limits expansion of new public works facilities to those improvements necessary to accommodate new development or uses permitted by the Coastal Act. Where existing or planned public works can accommodate only a limited amount of new development, priority is given to recreation, coastal-dependent land uses, essential public services, and basic industries vital to the economic health of the region, state, or nation.

4.1.3 Existing Policies and Regulations

The City's General Plan Conservation Element (1973) notes that "recent studies have concluded that residents of Pacific Grove cannot assume a complacent attitude toward the water resources of the area," and recommends that the feasibility of the use of reclaimed water for various uses (including irrigation of various public properties such as the Municipal Golf Course) be pursued by the City and other appropriate jurisdictions.

Policies are needed to insure that a portion of the water available to the City for new development is reserved for priority uses within the coastal zone (public recreation, coastal-related commercial recreation, coastal-related visitor-serving facilities, coastal-dependent industry). Non-priority uses (residential, general commercial) within the coastal zone would then compete with the uses outside the coastal zone for the unreserved water available to the City for development.

The policies that follow relate to the protection of available water supply and provide for:

- Reservation of a portion of the City's available water supply for Coastal Act priority use development;
- Permitting new development only when its water demand is consistent with available supply;
- Requiring low-water requirement/drought resistant landscaping; and
- Using reclaimed wastewater and captured runoff for irrigation where feasible.
- Native and/or drought resistant plants are to be planted in new development projects in order to conserve water.

4.1.4 General Policies

1. To the extent that water resources permit, the City shall reserve from its allotted water supply a sufficient quantity to accommodate coastal priority uses designated by this plan. This allocation shall be established as part of the LCP Implementation Program and shall include considerations of constrained and unconstrained water demand taking into account sources and timing of new water supply as well as the City's overall land use and economic policies.

The short-term (constrained development) allocation for the Coastal Zone is defined in the following table:

TABLE 3

PACIFIC GROVE COASTAL SHORT-TERM PROJECTED WATER USAGE CONSUMPTION IN ACRE-FEET/YEAR (AFY)

PLANNING AREA	WATER ALLOCATED FOR PRIORITY USES IN ACRE-FEET
I	0.25
II	0.0
III	0.25
IV	0.0
V	---
VI	0.50
TOTALS	1.0 AFY

The amount of water allocated in Table 3 will provide for a minimal expansion of visitor serving commercial uses.

The following table defines the unconstrained water allocation for coastal priority uses.

TABLE 4

PACIFIC GROVE COASTAL UNCONSTRAINED PROJECTED WATER USAGE CONSUMPTION IN ACRE-FEET/YEAR (AFY)

PLANNING AREA	WATER ALLOCATED FOR PRIORITY USES IN ACRE-FEET
I	12.5
II	0.0
III	4.6
IV	0.0
V	---
VI	6.3
TOTALS	23.4 AFY

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When the allocation for a particular planning area is exhausted, no additional development which would increase water use shall be approved in that planning area. Exceptions will be allowed for coastal priority uses when, by transferring water allocations from other coastal zone planning areas, sufficient water can be found to support such development. If increased allocations are made available to the coastal zone through the operation of conservation measures or other means, such increased water supplies shall be made available in the same proportions as provided in Table 4.

2. The City will continue to implement water conservation requirement, including the use of low flow fixtures and drought resistant landscaping.

3. The City shall encourage the use of and, where feasible, maximize sources for reclaimed wastewater and captured runoff for open-space irrigation.

4.1.5 Recommended Actions

1. To ensure that the demands of new development do not exceed the City's allocation, the City shall continue to participate in a water monitoring program to gauge the water use of new development in cooperation with the MPWMD, as well as district-wide water conservation planning activities.

4.2 CIRCULATION

4.2.1 Background

The City's principal traffic circulation system within the coastal zone includes Ocean View Boulevard and Sunset Drive as a continuous two-lane scenic drive, and portions of the City's major thoroughfares: Central Avenue and Highway 68. Asilomar Avenue also provides north-south access to the State Conference Grounds and Point Pinos. With the exception of Central Avenue, these roads are generally adequate to carry normal increases in traffic through 1990.

Non-automobile circulation within the City's coastal zone is provided by Monterey Peninsula Transit bus line 1 and 2 (Asilomar and Lover's Point). A recreational trail has been developed on the abandoned Southern Pacific Railroad right-of-way from the Monterey Bay Aquarium to Lover's Point. Purchase of the remaining abandoned Southern Pacific right-of-way has been suggested for open space use.

4.2.2 Relevant Coastal Act Policies

Coastal Act Section 30252 provides that new development contribute to the improvement of coastal access by facilitating transit, providing non-automobile circulation, providing adequate parking, and correlating residential development with the provision of on-site recreational facilities and adequate local public parks. Section 30254 limits expansion of new public works facilities to those improvements necessary to accommodate new development or uses permitted by the Coastal Act.

4.2.3 Existing City Policies

The General Plan's Circulation and Scenic Highway Element (January 1973) supports the present pattern of traffic circulation. The Ocean View Boulevard/Sunset Drive two-lane alignment is maintained to protect adjacent park lands, retain the scenic character, avoid the need to acquire right-of-way, and reduce traffic safety problems. While some redesign to improve pedestrian and bicycle safety may be sought, a separate parallel recreational trail has been proposed for regional uses by the Monterey Regional Park District. No major road improvements in the City's coastal zone are proposed. Signalization and other traffic improvements may become necessary at certain intersections as additional development takes place. The General Plan calls for such improvements to be provided by the adjacent development.

4.2.4 General Policies

1. New development and circulation improvements within the City's coastal zone shall be consistent with the provisions of Coastal Act Sections 30252 and 30254.

2. The City shall enhance access to its shoreline, while maintaining the coastal zone's unique character, by reducing the impact of the automobile. This will be accomplished, in part, by encouraging use of the bus system lines within the coastal zone, and by providing non-vehicular coastal access opportunities in the form of pedestrian/bicycle trails.

4.2.5 Specific Policies

1. Asilomar Avenue shall remain a city thoroughfare providing access to Asilomar Conference Grounds and an alternate coastal access route between Highway 68 and Ocean View Boulevard.

2. New developments in the coastal zone shall include adequate off-street parking to minimize the disruption of significant coastal access routes.

3. In coordination with the U.S. Coast Guard, the City shall improve parking pull-outs along Ocean View Boulevard west of Asilomar Avenue, including restoration and protection of "edge" areas, consistent with protection of sensitive habitats. Preparation of the Coastal Parks Plan shall include an investigation of means to maximize safety of pedestrians and bicyclists.

4. The designation of a continuous bicycle route along Ocean View Boulevard and Sunset Drive, extending from the existing bike route sign at Eardley Avenue and Ocean View Boulevard to the south end of Asilomar State Beach, will be retained, and extended to the Seventeen Mile Drive intersection.

5. New development at popular visitor destinations shall be required to provide bicycle racks to encourage bicycle users.

PUBLIC SHORELINE ACCESS

4.2.6 Recommended Actions

1. Intersection improvements at Ocean View/First, and Sunset/Asilomar necessary to improve traffic flow and coastal access should be implemented as funding is available.

2. Unmet transit service should be increased where possible as a means of providing access for residents without automobiles, and as a means of increasing the efficient use of coastal access roads.

3. Appropriate signing should be considered for popular visitor destinations and access points in conjunction with other sign programs under coastal access and habitat protection policies.

4. The City shall continue to pursue acquisition and development of the Southern Pacific railroad right-of-way (from Lover's Point to the Del Monte Forest Boundary) as a recreational trail/open space use. To insure continuity of Monterey Peninsula coastal zone access/recreational development, formulation of development standards should be coordinated with the City of Monterey and Monterey County access planning for the Cannery Row/Fisherman's Wharf and Spanish Bay areas. Alternate routes in the Monarch Pines mobile home park area should be determined and safe and defined access points to that route developed, minimizing impacts on adjacent land uses.

5. PUBLIC SHORELINE ACCESS

5.1 BACKGROUND

Public access is one of the major goals of the Coastal Act. Section 30500 states that "each local coastal program ... shall contain a specific public access component to assure that maximum public access to the coast and public recreation is provided." This chapter focuses on opportunities to preserve, provide, and enhance public access to the unique and diverse features of the City's shoreline.

Several terms are used throughout this chapter and are defined below:

1. Shoreline Access is the provision of pedestrian access from a public thoroughfare to and along the shoreline.

2. Lateral Accessway is an area of land providing public access along the water's edge. Lateral accessways should be used for public pass and repass, passive recreational use, or as otherwise found appropriate in a certified LUP. Lateral accessways can be on a beach, where contact with the water's edge is possible, or on a bluff, where only visual access is possible, or at the rear (water side) of buildings adjacent to the water's edge.

3. Vertical Accessway is an area of land providing a connection between the first public road, trail, or use area nearest the sea and the publicly-owned tidelands or established lateral accessway. A vertical accessway should be used for public pass and repass, passive recreational use or as otherwise found appropriate in a certified LUP.

The following discussion describes the major lateral and vertical access areas, and areas providing visual access to coastal waters. Key features described are shown on Figure 5.

AREA I: POINT CABRILLO

While the City owns the immediate shoreline within this area, fencing of the Stanford University property (Hopkins Marine Station) to keep the public separated from shoreline

research activities has eliminated public access to this area's three beaches. Vertical access to the shoreline at the west end of the Stanford property is provided by an easement required by the City in connection with resubdivision of a portion of the Stanford property. It is connected to Ocean View Boulevard via a 10 ft. wide strip which has been deeded to the City from Southern Pacific.

Pedestrian use of the recently acquired and improved Southern Pacific Railroad right-of-way, north of Ocean View Boulevard, is continuous and constitutes a major lateral access facility. Negotiations are continuing to acquire the remaining section of right-of-way with all of the right-of-way through the golf course and cemetery acquired for use by the course and cemetery operations. The balance of the right-of-way from Lighthouse to Sunset would be acquired for open space and an informal trail.

Signs directing visitors to the shoreline are located at the 1st Street/Central Avenue intersection, and the Ocean View Boulevard/Eardley Avenue intersection. A "bike route" sign is located on the north side of Ocean View, at the foot of Eardley; this is one of two bike route signs within the Pacific Grove coastal zone.

A parking lot between Sloat and Central Avenues, connected by a pedestrian bridge to the American Tin Cannery, provides parking for that development. Ten striped parallel spaces on the south side of Ocean View Boulevard provide additional parking. Street parking is available throughout the area. Unobstructed bay views are available at the inland coastal zone boundary along Central Avenue at 1st Street and Eardley Avenue.

AREA II: PACIFIC GROVE RETREAT

There are no formal or designated accessways in this area, but a path network over the blufftop Shoreline Park provides continuous pedestrian access between Area I and Area III. Vertical access to a pocket beaches is available by descending steep paths or by climbing over riprap. Access on the blufftop and headlands and to the beaches is unmanaged. Concerns for user safety deserve attention.

The pedestrian path on the old railroad right-of-way is used along its entire stretch through this area. Access to the path is available through Berwick Park and, near 13th Street. Parking along either side of Ocean View Boulevard is available throughout Area II.

From Central Avenue there are clear bay views along many of the local streets. The view down Grand Avenue of the rocks at Lover's Point is especially impressive.

Along Ocean View Boulevard, continuous views of the bay are available. The undeveloped bluffs and headlands afford fine views of Lover's Point and Monterey.

AREA III: LOVER'S POINT

The Lover's Point area contains three beaches -- one on either side of the pier, and one just west of the point itself. Stairways have been developed to serve all three beaches, and are connected by walkways and sidewalks on the blufftop. The beaches are utilized by sunbathers, picnickers, and skin divers. Handicapped access is available to the pier and to the beach south of the pier.

A path system commences at Lover's Point and continues westward to Perkins Park. Benches are located along the paths at several locations west of 17th Street. Small steps at the Ocean View Boulevard curb line provide direct access to the paths. Maintenance of the trails and vegetation has resulted in little danger to the blufftop habitat; however, erosion potential could be reduced by directing pedestrians to beach stairways.

Access to the pedestrian path on the old railroad right-of-way is available from the parking lot at the foot of Forest Avenue and 16th Street.

The Lover's Point area contains approximately 100 two-hour spaces located along Ocean View between Forest Avenue and Marine. Parking is unrestricted along the other portions of Ocean View in Area III. Twelve striped spaces (with no time limits) are located in front of the vacant property at the intersection of Briggs and 19th Streets.

Views of the bay are generally continuous along Ocean View Boulevard. Lover's Point Park and Perkins Park provide numerous prime bay vantage points for the pedestrian. Bay views are also available to guests of multi-level motels along Ocean View Boulevard.

AREA IV-A: OCEAN VIEW AREA

A continuous path network runs the length of this portion of Perkins Park, from Sea Palm to Asilomar Avenues, providing a blufftop pedestrian link between Areas III and IV B.

Numerous benches are located along the paths. The maintained status of most trails and vegetation results in little danger to the blufftop habitat. Again, erosion potential could be reduced by directing pedestrians to stay on designated paths.

At four points (near the foot of Coral Street, Beach Street, Shell Avenue, and Palm Avenue) stairways provide vertical access to small beaches. Access to a small beach near the foot of Acropolis Street is possible by descending the rocky bluff.

Parking is unrestricted in this area. Four pullouts on the bay side of Ocean View (at Sea Palm Avenue; between Beach Street and Shell Avenue -- at Otter Point; between Acropolis and Coral Streets; and between Asilomar Avenue and Acropolis Street) provide additional parking. The combined capacity for these pullouts is estimated to be about 70 cars. Picnic facilities are located at the Asilomar/Acropolis pullout.

There is a Class III (shared right-of-way) bicycle route in for this area. Striping and signs have not been provided.

Unrestricted bay views are available from Ocean View Boulevard, and from the paths and auto pullout areas in Perkins Park. Otter Point affords a popular vantage point for viewing the bay.

AREA IV-B: POINT PINOS

In this area, owned by the U.S. Government (with the exception of the City-owned sewer treatment plant), an informal path continues from the west end of Perkins Park, westward along the headlands and then southward to the last Ocean View Boulevard pullout, near the third hole of the municipal golf course. Pedestrian access to the beaches is readily available. Unmanaged pedestrian access in the headlands area has resulted in considerable trampling of vegetation.

Parking in the pullouts in this area is haphazard, with some vehicles parked at the very edge of the headlands. Impacts of parking to the bluff vegetation, and resulting erosion is evident in several areas. Combined capacity of the three pullout areas is estimated to be 70 cars.

Vehicle parking also occurs on the shoulder of Ocean View Boulevard, adjacent to the dunes. Inland of Ocean View, parking is available (dirt parking lot, with an estimated capacity of 50 cars) on the Lighthouse grounds, and also on

Asilomar Avenue at the entrance to the Lighthouse grounds (21 striped spaces). There are no parking restrictions in Area IV B.

Signs stating "Marine Refuge" are located at the Ocean View Boulevard pullout at the foot of Asilomar Avenue, and on Ocean View at the foot of Lighthouse Avenue. Signs prohibiting water contact activities and climbing on the Pt. Pinos rocky headlands are located on the beach opposite the Coast Guard fog horn. Visitor-directional signs are located at the Asilomar/Lighthouse Avenues intersection, and directly in front of the lighthouse entrance on Asilomar Avenue.

Unrestricted bay/ocean views are available from Ocean View Boulevard, as well as from the Asilomar/Lighthouse Avenues intersection at the southeast corner of Area IV B.

AREA V: SOUTHERN PACIFIC RAILROAD

In 1982, a joint powers agency consisting of the cities of Pacific Grove and Monterey, together with the Monterey Peninsula Regional Park District acquired the portion of the abandoned South Pacific right-of-way between Custom House Plaza (Monterey) and Lover's Point. In 1984, the portion of the right-of-way between the Monterey Bay Aquarium and Lover's Point was developed as a recreational trail for pedestrians and cyclists. Although to the west of Lover's Point the trail would not provide access along the immediate shoreline, the trail in this area would provide access to and along the coast by linking the Lover's Point/Cannery Row area to the Asilomar/Spanish Bay area. The City has continued to work with the City of Monterey and the Monterey Regional Park District to develop the portion of the right-of-way between the Monterey Bay Aquarium and Customs House Plaza in Monterey.

The route of the right-of-way from the mobile home park at Lover's Point passes through the City golf course and then through areas developed with single- and multi-family homes and motels. No ocean views are available from the right-of-way. Access to the right-of-way is provided at the various road intersections with the tracks, from Del Monte Boulevard to Pico Avenue.

AREA VI: ASILOMAR

Asilomar Conference Grounds

Dunes within the Asilomar Conference Grounds are continually subject to moderate or heavy recreational use, depending on location. Interpretive signs have been used with limited success to guide people away from sensitive areas. A striped pedestrian way crosses Sunset Drive.

Development of the proposed recreational trail along the railroad right-of-way would provide an additional access opportunity. The only public parking facilities in the area are those at the Asilomar Conference Grounds. There are no restrictions on streetside parking in Area VI. Visitor-directional signs are located at the Asilomar Avenue intersections with Sinex Avenue and with Sunset Drive. Within the area there is no designated bicycle route.

Any new development within this area will be on the inland side of Sunset Drive. Consequently, there is no possibility for development to interfere with ocean views from that road. The Conference Grounds' dune areas adjacent to Sunset Drive possess considerable visual interest, and should be protected.

Asilomar Addition:

Asilomar State Beach makes up the majority of this planning area's shoreline lands. Seven contiguous privately-owned lots, one of which contains a single-family residence, are situated between the northern boundary of the State Beach and southern boundary of Pt. Pinos' open shorefront lands. Access is not available through these parcels. A continuous informal, trail network -- providing both lateral and vertical access opportunities -- extends the length of the State Beach property.

There are no designated public parking facilities within Area VI. Vehicle parking occurs on the shoulders of Sunset Drive, with the heaviest concentrations occurring south of Pico Avenue. There are no restrictions on parking, other than overnight parking. For a considerable distance, large rocks have been placed along the east side of Sunset Drive to prevent automobile intrusion onto State park property.

Signs identifying the State Beach, warning of rip current hazards, and prohibiting camping and unleashed dogs, are located at frequent intervals along Sunset Drive. No designated bike route exists in Area VI.

Continuous unobstructed ocean views are available from Sunset Drive, except at the single residence opposite Jewell Avenue.

Remaining vacant lands in the Asilomar dunes area, on the inland side of Sunset Drive, serve to lessen the contrast between existing development and the undisturbed open space of Asilomar State Beach and Asilomar Conference Grounds. Maximum retention of open areas within the Asilomar dunes will help protect the visual qualities of this area.

5.2 RELEVANT COASTAL ACT POLICIES

In addition to the requirements of Coastal Act Section 30500(a), that each LCP contain a public access component, several other Coastal Act policies address public access. Sections 30210 through 30212 require that any development occurring within the coastal zone shall not interfere with the public's right of access to the ocean. In addition, new development must provide access from the nearest public road to the shoreline so long as it is not inconsistent with public safety, military security needs, or protection of fragile coastal resources.

Sections 30212.5, 30252 and 30254 of the Coastal Act require that new development maintain and enhance public access to the coast by minimizing the use of coastal access routes; public facilities shall be distributed throughout an area in order to mitigate against impacts of overcrowding or overuse of any single area. In addition, new public works facilities must accommodate needs generated by development consistent with the provisions of the Coastal Act.

5.3 EXISTING POLICIES AND REGULATIONS

The City's General Plan and Open Space and Conservation Plan contain numerous policies and recommendations regarding preservation of open space lands for the purpose of providing outdoor recreation. However, these documents contain no specific policies or recommendations regarding the provision of public access to the shoreline except for citing two possibilities for non-vehicular access through portions of what is now the coastal zone: development of the railroad right-of-way as a recreational trail, and provision of a bicycle trail to run parallel to Ocean View Boulevard and Sunset Drive.

The only beaches lacking public access in the City's coastal zone are the three beaches on the shoreline adjacent to Stanford's Hopkins Marine Lab property. The restrictions to

this small segment of Pacific Grove's shoreline balances the need for public access with the protection of a sensitive environmental area. At the east end of the Stanford property shoreline access has been required by the City as a condition of subdivision approvals.

5.4 GENERAL POLICIES

1. The City shall provide safe and adequate pedestrian access to and along the shoreline.

2. The City shall coordinate shoreline access planning with the City of Monterey, County of Monterey, State Department of Parks and Recreation, U.S. Coast Guard, and Monterey Peninsula Regional Park District.

3. The City shall develop, as funding is available, a Coastal Parks Plan for the Pacific Grove coastal parklands, including the Lighthouse Reservation. The purpose of this plan as it relates to shoreline access, is to:

   a. provide improved accessways where desirable, and control unrestricted parking by appropriate barriers or other means, consistent with the visual resource protection policies of this plan.

   b. improve the existing sign program to include interpretive information pertaining to public safety, public access, protection of sensitive habitats, and special natural or man-made features.

   c. prevent overuse and damage to plant and animal habitats and archaeological sites by developing regulations concerning maximum public usage.

   d. provide standards for maintenance, management, and development of the City's coastal parklands in a manner consistent with the Resource Management policies of this Plan.

4. The City shall enhance access to its shoreline, while maintaining the coastal zone's unique character, by reducing the impact of automobiles. This shall be accomplished, in part, by encouraging use of public transit within the coastal zone, and by providing non-vehicular coastal zone access opportunities.

5.5 SPECIFIC POLICIES

1. The City will maintain a continuous pedestrian coastal trail, the length of the City's coastal zone, seaward of Ocean View Boulevard/Sunset Drive.

2. As part of the planning process for the Pacific Grove Coastal Parks Plan the City will consider the following opportunities:

   a. In Planning Area II, (from 3rd Street to Fountain Avenue), provide well-defined trails along the bluffs with stairways to provide access to the water. Direct recreation to Berwick Park;

   b. In Planning Areas III and IV (from Fountain Avenue to 17 Mile Drive), maintain existing trails and vegetation. Reduce erosion by directing pedestrians to beach stairways;

   c. In Planning Area IV, clearly define parking areas from 17 Mile Drive west, to protect bluff vegetation and reduce erosion. To reduce conflicts between automobile and pedestrians/cyclists, provide ingress-egress directional arrows at parking areas.

   d. In Planning Area VI, on State-owned lands west of Sunset Drive, encourage the delineation of parking areas so as to reduce habitat damage by vehicles and to reduce conflicts with pedestrians/cyclists.

   e. For all existing and new shoreline accessways in Planning Areas I, II, III, IV and VI, develop an accessways maintenance program.

   f. Delineate specific tour bus pullout areas where designated trails and public restrooms are available.

   g. Encourage Hopkins Marine Station to replace existing chain link fence.

3. Excessive signs shall be avoided.

4. Public access from Sunset Drive/Ocean View Boulevard to the shoreline and along the coast shall be provided in any new development project except where (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, or (2) adequate access exists nearby. Public vertical access easements to the

shoreline shall have minimum widths of ten feet if walkways and five feet if stairways. Public lateral access easements shall be at least ten feet in width and generally no more than 25 feet inland from the mean high tide line. Trail width may be reduced to four feet where the habitat is considered fragile and where damage to dune vegetation and in particular rare and endangered flora is likely to result with wider trails. These requirements may be satisfied as follows: Planning Area I (Cabrillo Pt.), dedication and construction of vertical accessways at locations shown on Shoreline Access map (Fig.5); Planning Area VI (Asilomar Dunes), dedication of blufftop lateral access easement to an appropriate public agency or private conservation foundation, where private residential use could otherwise impair such access; and in Planning Area VI (Sunset Drive commercial area), installation of sidewalks and bike lanes where parcels designated Commercial and Visitor Accommodation front on Sunset Drive.

5. The City shall coordinate with the County of Monterey, California Department of Parks and Recreation, California Coastal Conservancy, the California Coastal Commission, and the Spanish Bay Resort project permittee to provide parking, bike lane, and segregated pedestrian trail on seaward shoulder of Sunset Drive where adjacent to the Spanish Bay Resort property.

6. The abandonded Southern Pacific railroad right-of-way from Lover's Point southwards to the point where it enters the Spanish Bay Resort property shall be designated for public recreational use. No development shall be allowed within the corridor which would compromise its utility for recreational access. Any additional private development within the mobile home park, or elsewhere within the abandoned right-of-way which could impair the use of the corridor as a potential accessway shall be conditioned to require dedication of a through recreational access easement to an appropriate public agency prior to issuance of permits; or deposit of in-lieu fees sufficient to establish alternate route. If an alternate route is established, it must result in through public access between the Lover's Point area and the existing Spanish Bay trail system, utilizing the abandoned railroad right-of-way wherever feasible.

As a secondary or conditional use, those portions of the right-of-way which are not purchased for public recreational use may be aggregated with adjoining existing parcels, provided that each segment of the former right-of-way is subject to the following easements:

a) an open space easement, encompassing the entire segment; and,

b) a public access easement, at least 20 feet in width, for the purpose of establishing a recreational trail route.

5.6 RECOMMENDED ACTIONS

1. The City encourages the State to adopt a Resource Management Plan for Asilomar State Beach, to include provisions for designated accessways which are both safe and non-disruptive of sensitive habitats.

CALIFORNIA COASTAL ACT OF 1976

as amended February 1986



CALIFORNIA COASTAL COMMISSION

PUBLIC RESOURCES CODE

DIVISION 20

CALIFORNIA COASTAL ACT

Chapter		Section
1	Findings and Declarations and General Provisions	30000
2	Definitions	30100
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3	Coastal Resources Planning and Management Policies	30200
4	Creation, Membership, and Powers of Commission and Regional Commissions	30300 30400
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FEBRUARY 1986

CHAPTER 1

FINDINGS AND DECLARATIONS AND GENERAL PROVISIONS

Section	
30000	Citation.
30001	Legislative findings and declarations; ecological balance.
30001.2	Legislative findings and declarations; economic development.
30001.5	Legislative findings and declarations; goals.
30002	Legislative findings and declarations; implementation of plan.
30003	Compliance by public agencies.
30004	Legislative findings and declarations; necessity of continued planning and management.
30005	Local governmental powers; nuisances; attorney general's powers.
30005.5	Local governmental powers.
30006	Legislative findings and declarations; public participation.
30007	Housing; local governments.
30007.5	Legislative findings and declarations; resolution of policy conflicts.
30008	Division as coastal zone management program.
30009	Construction.
30010	Compensation for taking of private property; legislative declaration.
30011	Application of Govt. Code #65590 to development under this division.

Section 30000.

This division shall be known and may be cited as the California Coastal Act of 1976.

Section 30001.

The Legislature hereby finds and declares: -

(a) That the California coastal zone is a distinct and valuable natural resource of vital and enduring interest to all the people and exists as a delicately balanced ecosystem.

(b) That the permanent protection of the state's natural and scenic resources is a paramount concern to present and future residents of the state and nation.

(c) That to promote the public safety, health, and welfare, and to protect public and private property, wildlife, marine fisheries, and other ocean resources, and the natural environment, it is necessary to protect the ecological balance of the coastal zone and prevent its deterioration and destruction.

(d) That existing developed uses, and future developments that are carefully planned and developed consistent with the policies of this division, are essential to the economic and social well-being of the people of this state and especially to working persons employed within the coastal zone.

(Amended by Ch. 1090, Stats. 1979.)

Section 30001.2.

The Legislature further finds and declares that, notwithstanding the fact electrical generating facilities, refineries, and coastal-dependent developments, including ports and commercial fishing facilities, offshore petroleum and gas development, and liquefied natural gas facilities, may have significant adverse effects on coastal resources or coastal access, it may be necessary to locate such developments in the coastal zone in order to ensure that inland as as coastal resources are preserved and that orderly economic development proceeds within the state.

Section 30001.5

The Legislature further finds and declares that the basic goals of the state for the coastal zone are to:

(a) Protect, maintain, and where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and artificial resources.

(b) Assure orderly, balanced utilization and conservation of coastal zone resources taking into account the social and economic needs of the people of the state.

(c) Maximize public access to and along the coast and maximize public recreational opportunities in the coastal zone consistent with sound resources conservation principles and constitutionally protected rights of private property owners.

(d) Assure priority for coastal-dependent and coastal-related development over other development on the coast.

(e) Encourage state and local initiatives and cooperation in preparing procedures to implement coordinated planning and development for mutually beneficial uses, including educational uses, in the coastal zone.

(Amended by Ch. 1090, Stats. 1979.)
(Amended by Ch. 1617, Stats. 1982.)

Section 30002.

The Legislature further finds and declares that:

(a) The California Coastal Zone Conservation Commission, pursuant to the California Coastal Zone Conservation Act of 1972 (commencing with Section 27000), has made a detailed study of the coastal zone; that there has been extensive participation by other governmental agencies, private interests, and the general public in the study; and that, based on the study, the commission has prepared a plan for the orderly, long-range conservation, use, and management of the natural, scenic, cultural, recreational, and manmade resources of the coastal zone.

(b) Such plan contains a series of recommendations which require implementation by the Legislature and that some of those recommendations are appropriate for immediate implementation as provided for in this division while others require additional review.

Section 30003.

All public agencies and all federal agencies, to the extent possible under federal law or regulations or the United States Constitution, shall comply with the provisions of this division.

Section 30004.

The Legislature further finds and declares that:

(a) To achieve maximum responsiveness to local conditions, accountability, and public accessibility, it is necessary to rely heavily on local government and local land use planning procedures and enforcement.

(b) To ensure conformity with the provisions of this division, and to provide maximum state involvement in federal activities allowable under federal law or regulations or the United States Constitution which affect California's coastal resources, to protect regional, state, and national interests in assuring the maintenance of the long-term productivity and economic vitality of coastal resources necessary for the well-being of the people of the state, and to avoid long-term costs to the public and a diminished quality of life

resulting from the misuse of coastal resources, to coordinate and integrate the activities of the many agencies whose activities impact the coastal zone, and to supplement their activities in matters not properly within the jurisdiction of any existing agency, it is necessary to provide for continued state coastal planning and management through a state coastal commission.

Section 30005.

No provision of this division is a limitation on any of the following:

(a) Except as otherwise limited by state law, on the power of a city or county or city and county to adopt and enforce additional regulations, not in conflict with this act, imposing further conditions, restrictions, or limitations with respect to any land or water use or other activity which might adversely affect the resources of the coastal zone.

(b) On the power of any city or county or city and county to declare, prohibit, and abate nuisances.

(c) On the power of the Attorney General to bring an action in the name of the people of the state to enjoin any waste or pollution of the resources of the coastal zone or any nuisance.

(d) On the right of any person to maintain an appropriate action for relief against a private nuisance or for any other private relief.

Section 30005.5.

Nothing in this division shall be construed to authorize any local government, or to authorize the commission to require any local government, to exercise any power it does not already have under the Constitution and laws of this state or that is not specifically delegated pursuant to Section 30519.

(Added by Ch. 744, Stats. 1979.)

Section 30006.

The Legislature further finds and declares that the public has a right to fully participate in decisions affecting coastal planning, conservation and development; that achievement of sound coastal conservation and development is dependent upon public understanding and support; and that the continuing planning and implementation of programs for coastal conservation and development should include the widest opportunity for public participation.

Section 30007.

Nothing in this division shall exempt local governments from meeting the requirements of state and federal law with respect to providing low-and moderate-income housing, replacement housing, relocation benefits, or any other obligation related to housing imposed by existing law or any law hereafter enacted.

Section 30007.5.

The Legislature further finds and recognizes that conflicts may occur between one or more policies of the division. The Legislature therefore declares that in carrying out the provisions of this division such conflicts be resolved in a manner which on balance is the most protective of significant coastal resources. In this context, the Legislature declares that broader policies which, for example, serve to concentrate development in close proximity to urban and employment centers may be more protective, overall, than specific wildlife habitat and other similar resource policies.

Section 30008.

This division shall constitute California's coastal zone management program within the coastal zone for purposes of the Federal Coastal Zone Management Act of 1972 (16 U.S.C. 1451, et seq.) and any other federal act heretofore or hereafter enacted or amended that relates to the planning or management of coastal zone resources; provided, however, that within federal lands excluded from the coastal zone pursuant to the Federal Coastal Zone Management Act of 1972, the State of California shall, consistent with applicable federal and state laws, continue to exercise the full range of powers, rights, and privileges it now possesses or which may be granted.

(Amended by Ch. 1075, Stats. 1978.)

Section 30009.

This division shall be liberally construed to accomplish its purposes and objectives.

Section 30010.

The Legislature hereby finds and declares that this division is not intended, and shall not be construed as authorizing the regional commission, and commission, port governing body, or local government acting pursuant to this division to exercise their power to grant or deny a permit in a manner which will take or damage private property for public use, without the payment of just compensation therefor. This section is not intended to increase or decrease the rights of any owner of property under the Constitution of the State of California or the United States.

Section 30011.

Nothing in this division shall authorize the commission to review a local government's application of the requirements of Section 65590 of the Government Code to any development. In addition, the commission shall not require any applicant for a coastal development permit or any local government to provide certification or other evidence of compliance with the requirements of Section 65590 of the Government Code. The commission may, however, solely in connection with coastal development permit applications described in subdivision(c) of Section 30600.1, require information about the status of a local government's action to apply the requirements of Section 65590 of the Government Code. This information shall be used for the purpose determining time limits for commission action on these applications as provided in that subdivision (c).

(Added by Ch. 43, Stats. 1982.)

CHAPTER 3

COASTAL RESOURCES PLANNING AND MANAGEMENT POLICIES

ARTICLE 1

GENERAL

Section	
30200	Policies as standards; resolution of policy conflicts.

ARTICLE 2

PUBLIC ACCESS

30210	Access; recreational opportunities; posting.
30211	Development not to interfere with access.
30212	New development projects; provision for access; exceptions.
30212.5	Public facilities; distribution.
30213	Lower cost visitor and recreational facilities; encouragement and provision, overnight room rentals.
30214	Implementation of public access policies; legislative intent.

ARTICLE 3

RECREATION

30220	Protection of certain water-oriented activities.
30221	Oceanfront land; protection for recreational use and development.
30222	Private lands; priority of development purposes.
30222.5	Oceanfront land; protection for aquaculture use and development.
30223	Upland areas.
30224	Recreational boating use; encouragement; facilities.

ARTICLE 1

GENERAL

Section 30200.

(a) Consistent with the coastal zone values cited in Section 30001 and the basic goals set forth in Section 30001.5, and except as may be otherwise specifically provided in this division, the policies of this chapter shall constitute the standards by which the adequacy of local coastal programs, as provided in Chapter 6 (commencing with Section 30500), and, the permissibility of proposed developments subject to the provisions of this division are determined. All public agencies carrying out or supporting activities outside the coastal zone that could have a direct impact on resources within the coastal zone shall consider the effect of such actions on coastal zone resources in order to assure that these policies are achieved.

(b) Where the commission or any local government in implementing the provisions of this division identifies a conflict between the policies of this chapter, Section 30007.5 shall be utilized to resolve the conflict and the resolution of such conflicts shall be supported by appropriate findings setting forth the basis for the resolution of identified policy conflicts.

(Amended by Ch. 43, Stats. 1982.)

ARTICLE 2

PUBLIC ACCESS

Section 30210.

In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

(Amended by Ch. 1075, Stats. 1978.)

Section 30211.

Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Section 30212.

(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where:

(1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources,

(2) adequate access exists nearby, or,

(3) agriculture would be adversely affected. Dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.

(b) For purposes of this section, "new development" does not include:

(1) Replacement of any structure pursuant to the provisions of subdivision (g) of Section 30610.

(2) The demolition and reconstruction of a single-family residence; provided, that the reconstructed residence shall not exceed either the floor area, height or bulk of the former structure by more than 10 percent, and that the reconstructed residence shall be sited in the same location on the affected property as the former structure.

(3) Improvements to any structure which do not change the intensity of its use, which do not increase either the floor area, height, or bulk of the structure by more than 10 percent, which do not block or impede public access, and which do not result in a seaward encroachment by the structure.

(4) The reconstruction or repair of any seawall; provided, however, that the reconstructed or repaired seawall is not a seaward of the location of the former structure.

(5) Any repair or maintenance activity for which the commission has determined, pursuant to Section 30610, that a coastal development permit will be required unless the commission determines that the activity will have an adverse impact on lateral public access along the beach.

As used in this subdivision "bulk" means total interior cubic volume as measured from the exterior surface of the structure.

(c) Nothing in this division shall restrict public access nor shall it excuse the performance of duties and responsibilities of public agencies which are required by Sections 66478.1 to 66478.14, inclusive, of the Government Code and by Section 4 of Article X of the California Constitution.

(Amended by Ch. 1075, Stats. 1978.)
(Amended by Ch. 919, Stats. 1979.)
(Amended by Ch. 744, Stats. 1983.)

Section 30212.5.

Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, or overcrowding or overuse by the public of any single area.

Section 30213.

Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.

Neither the commission nor any regional commission shall either: (1) require that overnight room rentals be fixed at an amount certain for any privately owned and operated hotel, motel, or other similar visitor-serving facility located on either public or private lands; or (2) establish or approve any method for the identification of low or moderate-income persons for the purpose of determining eligibility for overnight room rentals in any such facilities.

(Amended by Ch. 1191, Stats. 1979.)
(Amended by Ch. 1087, Stats. 1980.)
(Amended by Ch. 1007, Stats. 1981.)

Section 30214.

(a) The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following:

ARTICLE 3

RECREATION

Section 30220.

Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

Section 30221.

Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and forseeable future demand for public or commercial recreational activities that could be accomodated on the property is already adequately provided for in the area.

(Amended by Ch. 380, Stats. 1978.)

Section 30222.

The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.

Section 30222.5.

Ocean front land that is suitable for coastal dependent aquaculture shall be protected for that use, and proposals for aquaculture facilities located on those sites shall be given priority, except over other coastal dependent developments or uses.

(Added by Ch. 1486, Stats. 1982.)

Section 30223.

Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.

Section 30224.

Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division, by developing dry storage areas, increasing public launching facilities, providing additional berthing space in existing harbors, limiting non-water-dependent land uses that congest access corridors and preclude boating support facilities, providing harbors of refuge, and by providing for new boating facilities in natural harbors, new protected water areas, and in areas dredged from dry land.

(1) Topographic and geologic site characteristics.

(2) The capacity of the site to sustain use and at what level of intensity.

(3) The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area and the proximity of the access area to adjacent residential uses.

(4) The need to provide for the management of access areas so as to protect the privacy of adjacent property owners and to protect the aesthetic values of the area by providing for the collection of litter.

(b) It is the intent of the Legislature that the public access policies of this article be carried out in a reasonable manner that considers the equities and that balances the rights of the individual property owner with the public's constitutional right of access pursuant to Section 4 of Article X of the California Constitution. Nothing in this section or any amendment thereto shall be construed as a limitation on the rights guaranteed to the public under Section 4 of Article X of the California Constitution.

(c) In carrying out the public access policies of this article, the commission, regional commissions, and any other responsible public agency shall consider and encourage the utilization of innovative access management techniques, including, but not limited to, agreements with private organizations which would minimize management costs and encourage the use of volunteer programs.

(Amended by Ch. 919, Stats. 1979.)

ARTICLE 4

MARINE ENVIRONMENT

Section

30230 Marine resources; maintenance.
30231 Biological productivity; waste water.
30232 Oil and hazardous substance spills.
30233 Diking, filling or dredging.
30234 Commercial fishing and recreational facilities.
30235 Revetments, breakwaters, etc.
30236 Water supply and flood control.
30237 Habitat conservation plan; Bolsa Chica.

ARTICLE 5

LAND RESOURCES

30240 Environmentally sensitive habitat areas; adjacent developments.
30241 Prime agricultural land; maintenance in agricultural production.
30241.5 Agricultural lands; viability of.
30242 Lands suitable for agricultural use; conversion.
30243 Productivity of soils and timberlands; conversions.
30244 Archaeological or paleontological resources.

ARTICLE 6

DEVELOPMENT

30250 Location, generally.
30251 Scenic and qualities.
30252 Maintenance and enhancement of public areas.
30253 Safety, stability, pollution, energy conservation, visitors.
30254 Public works facilities.
30254.5 Sewage treatment plants and conditions.
30255 Priority of coastal-dependent developments.

ARTICLE 4

MARINE ENVIRONMENT

Section 30230.

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231.

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Section 30232.

Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.

Section 30233.

(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

(1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.

(2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.

(3) In wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game pursuant to subdivision (b) of Section 30411, for boating facilities if,

in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland. The size of the wetland area used for boating facilities, including berthing space, turning basins, necessary navigation channels, and any necessary support service facilities, shall not exceed 25 percent of the degraded wetland.

(4) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.

(5) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.

(6) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.

(7) Restoration purposes.

(8) Nature study, aquaculture, or similar resource dependent activities.

(b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable long shore current systems.

(c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the Department of Fish and Game, including, but not limited to, the 19 coastal wetlands identified in its report entitled, "Acquisition Priorities for the Coastal Wetlands of California", shall be limited to very minor incidental public facilities, restorative measures, nature study, commercial fishing facilities in Bodega Bay, and development in already developed parts of south San Diego Bay, if otherwise in accordance with this division.

For the purposes of this section, "commercial fishing facilities in Bodega Bay" means that not less than 80 percent of all boating facilities proposed to be developed or improved, where such improvement would create additional berths in Bodega Bay, shall be designed and used for commercial fishing activities.

(d) Erosion control and flood control facilities constructed on water courses can impede the movement of sediment and nutrients which would otherwise be carried by storm runoff into coastal waters. To facilitate the continued delivery of these sediments to the littoral zone, whenever feasible, the material removed from these facilities may be placed at appropriate points on the shoreline in accordance with other applicable provisions of this division, where feasible mitigation measures have been provided to minimize adverse

environmental effects. Aspects that shall be considered before issuing a coastal development permit for such purposes are the method of placement, time of year of placement, and sensitivity of the placement area.

(Amended by Ch. 673, Stats. 1978.)
(Amended by Ch. 43, Stats. 1982.)
(Amended by Ch. 1167, Stats. 1982.)
(Amended by Ch. 454, Stats. 1983.)

Section 30234.

Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided. Proposed recreational boating facilities shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry.

Section 30235.

Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible.

Section 30236.

Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the floodplain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat.

Section 30237.

(a) This section shall apply only to the Bolsa Chica wetlands or a portion thereof in the County of Orange.

The County of Orange or any landowner may petition the Department of Fish and Game, on or before October 1, 1983, to prepare a habitat conservation plan. Upon receipt of the petition, the Department of Fish and Game and the State Coastal Conservancy, in cooperation with the county and any landowner, shall jointly prepare a habitat conservation plan in order to carry out the following objectives:

(1) To provide for the conservation of the habitat of fish and wildlife resources.

(2) To anticipate and resolve potential conflicts between the conservation of fish and wildlife resources or their habitat and actions by local, state, or federal agencies and private persons.

(3) To provide for greater certainty and predictability regarding the conservation of fish and wildlife resources and their habitat and regarding private and public activities potential affecting those resources.

(b) With respect to the preparation of the habitat conservation plan, the Department of Fish and Game shall be the lead agency for wetland identification purposes and the State Coastal Conservancy shall be the lead agency for the purposes of identifying land use alternatives. Upon completion of the habitat conservation plan and on or before July 20, 1984, the Department of Fish and Game and the State Coastal Conservancy shall jointly forward it to the commission for approval. The commission shall approve the plan if it finds it raises no substantial issue as to conformity with the planning and management policies of this chapter. If the plan is approved by the Commission, it may be incorporated into the county's local coastal program.

(c) All costs of preparation of the habitat conservation plan, including, but not limited to, additional necessary personnel temporarily appointed by the Department of Fish and Game and the State Coastal Conservancy, shall be paid by the petitioner or petitioners. If additional personnel are necessary, the Department of Finance shall review the requests to ensure that the personnel required will be utilized to carry out only the purposes of this section. If the Department of Finance finds the additional personnel required will be utilized only to carry out the purposes of this section, the temporary appointment requests shall be processed and approved by the Department of Finance in an expedited fashion, in no event longer than 10 working days after the requests are made. Furthermore, these requests for temporary appointments shall be exempt from all state personnel hiring requirements, for the review provided in this subdivision by the Department of Finance, and from any personnel hiring limitations during the time period set forth in this section for the preparation of the habitat conservation plan.

(Added by Ch. 1203, Stats. 1983.)

Section 30240.

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

Section 30241.

The maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the areas agricultural economy, and conflicts shall be minimized between agricultural and urban land uses through all of the following:

(a) By establishing stable boundaries separating urban and rural areas, including, where necessary, clearly defined buffer areas to minimize conflicts between agricultural and urban land uses.

(b) By limiting conversions of agricultural lands around the periphery of urban areas to the lands where the viability of existing agricultural use is already severely limited by conflicts with urban uses or where the conversion of the lands would complete a logical and viable neighborhood and contribute to the establishment of a stable limit to urban development.

(c) By permitting the conversion of agricultural land surrounded by urban uses where the conversion of the land would be consistent with Section 30250.

(d) By developing available lands not suited for agriculture prior to the conversion of agricultural lands.

(e) By assuring that public service and facility expansions and nonagricultural development do not impair agricultural viability, either through increased assessment costs or degraded air and water quality.

(f) By assuring that all divisions of prime agricultural lands, except those conversions approved pursuant to subdivision (b), and all development adjacent to prime agricultural lands shall not diminish the productivity of such prime agricultural lands.

(Amended by Ch. 1066, Stats. 1981.)
(Amended by Ch. 43, Stats. 1982.)

Section 30241.5

(a) If the viability of existing agricultural uses is an issue pursuant to subdivision (b) of Section 30241 as to any local coastal program or amendment

to any certified local coastal program submitted for review and approval under this division, the determination of "viability" shall include, but not be limited to, consideration of an economic feasibility evaluation containing at least both of the following elements:

(1) An analysis of the gross revenue from the agricultural products grown in the area for the five years immediately preceding the date of the filing of a proposed local coastal program or an amendment to any local coastal program.

(2) An analysis of the operational expenses, excluding the cost of land, associated with the production of the agricultural products grown in the area for the five years immediately preceding the date of the filing of a proposed local coastal program or an amendment to any local coastal program.

For purposes of this subdivision, "area" means a geographic area of sufficient size to provide an accurate evaluation of the economic feasibility of agricultural uses for those lands included in the local coastal program or in the proposed amendment to a certified local coastal program.

(b) The economic feasibility evaluation required by subdivision (a) shall be submitted to the commission, by the local government, as part of its submittal of a local coastal program or an amendment to any local coastal program. If the local government determines that it does not have the staff with the necessary expertise to conduct the economic feasibility evaluation, the evaluation may be conducted under agreement with the local government by a consultant selected jointly by local government and the executive director of the commission.

(Added by Ch. 259, Stats. 1984.)

Section 30242.

All other lands suitable for agricultural use shall not be converted to nonagricultural uses unless (1) continued or renewed agricultural use is not feasible, or (2) such conversion would preserve prime agricultural land or concentrate development consistent with Section 30250. Any such permitted conversion shall be compatible with continued agricultural use on surrounding lands.

Section 30243.

The long-term productivity of soils and timberlands shall be protected, and conversions of coastal commercial timberlands in units of commercial size to other uses or their division into units of noncommercial size shall be limited to providing for necessary timber processing and related facilities.

Section 30244.

Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

ARTICLE 6

DEVELOPMENT

Section 30250.

(a) New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accomodate it, in other areas with adequate public services and where it will not have a significant adverse effects, either individually or cumulatively, on coastal resources. In addition, land divisions, other than leases for agricultural uses, outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels.

(b) Where feasible, new hazardous industrial development shall be located away from existing developed areas.

(c) Visitor-serving facilities that cannot feasibly be located in existing developed areas shall be located in existing isolated developments or at selected points of attraction for visitors.

(Amended by Ch. 1090, Stats. 1979.)

Section 30251.

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

Section 30252.

The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (3) providing nonautomabile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential for public transit for high intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of onsite recreational facilities to serve the new development.

Section 30253.

New development shall:

(1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

(2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

(3) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development.

(4) Minimize energy consumption and vehicle miles traveled.

(5) Where appropriate, protect special communities and neighborhoods which, because of their unique characteristics, are popular visitor destination points for recreational uses.

Section 30254.

New or expanded public works facilities shall be designed and limited to accommodate needs generated by development or uses permitted consistent with the provisions of this division; provided, however, that it is the intent of the Legislature that State Highway Route 1 in rural areas of the coastal zone remain a scenic two-lane road. Special districts shall not be formed or expanded except where assessment for, and provision of, the service would not induce new development inconsistent with this division. Where existing or planned public works facilities can accommodate only a limited amount of new development, services to coastal dependent land use, essential public services and basic industries vital to the economic health of the region, state, or nation, public recreation, commercial recreation, and visitor-serving land uses shall not be precluded by other development.

Section 30254.5.

Notwithstanding any other provision of law, the commission may not impose any term or condition on the development of any sewage treatment plant which is applicable to any future development that the commission finds can be accommodated by that plan consistent with this division. Nothing in this section modifies the provisions and requirements of Sections 30254 and 30412.

(Added by Ch. 978, Stats. 1984.)

Section 30255.

Coastal-dependent developments shall have priority over other developments on or near the shoreline. Except as provided elsewhere in this division, coastal-dependent developments shall not be sited in a wetland. When appropriate, coastal-related developments should be accommodated within reasonable proximity to the coastal-dependent uses they support.

(Amended by Ch. 1090, Stats. 1979.)

ARTICLE 7

INDUSTRIAL DEVELOPMENT

Section	
30260	Location or expansion.
30261	Use of tanker facilities; liquefied natural gas terminals.
30262	Oil and gas development.
30263	Refineries or petrochemical facilities.
30264	Thermal electric generating plants.
30265	Offshore oil transport and refining.
30265.5	Coordination of offshore oil transport and refining activities.

ARTICLE 7

INDUSTRIAL DEVELOPMENT

Section 30260.

Coastal-dependent industrial facilities shall be encouraged to locate or expand within existing sites and shall be permitted reasonable long-term growth where consistent with this division. However, where new or expanded coastal-dependent industrial facilities cannot feasibly be accommodated consistent with other policies of this division, they may nonetheless be permitted in accordance with this section and Sections 30261 and 30262 if (1) alternative locations are infeasible or more environmentally damaging; (2) to do otherwise would adversely affect the public welfare; and (3) adverse environmental effects are mitigated to the maximum extent feasible.

Section 30261.

(a) Multicompany use of existing and new tanker facilities shall be encouraged to the maximum extent feasible and legally permissible, except where to do so would result in increased tanker operations and associated onshore development incompatible with the land use and environmental goals for the area. New tanker terminals outside of existing terminal areas shall be situated as to avoid risk to environmentally sensitive areas and shall use a monobuoy system, unless an alternative type of system can be shown to be environmentally preferable for a specific site. Tanker facilities shall be designed to (1) minimize the total volume of oil spilled, (2) minimize the risk of collision from movement of other vessels, (3) have ready access to the most effective feasible containment and recovery equipment for oilspills, and (4) have onshore deballasting facilities to receive any fouled ballast water from tankers where operationally or legally required.

(b) Because of the unique problems involved in the importation, transportation, and handling of liquefied natural gas, the location of terminal facilities therefore shall be determined solely and exclusively as provided in Chapter 10 (commencing with Section 5550) of Division 2 of the Public Utilities Code and the provisions of this division shall not apply unless expressly provided in such Chapter 10.

(Amended by Ch. 855, Stats. 1977.)

Section 30262.

Oil and gas development shall be permitted in accordance with Section 30260, if the following conditions are met:

(a) The development is performed safely and consistent with the geologic conditions of the well site.

(b) New or expanded facilities related to such development are consolidated, to the maximum extent feasible and legally permissible, unless consolidation will have adverse environmental consequences and will not significantly reduce the number of producing wells, support facilities, or sites required to produce the reservoir economically and with minimal environmental impacts.

(c) Environmentally safe and feasible subsea completions are used when drilling platforms or islands would substantially degrade coastal visual qualities unless use of such structures will result in substantially less environmental risks.

(d) Platforms or islands will not be sited where a substantial hazard to vessel traffic might result from the facility or related operations, determined in consultation with the United States Coast Guard and the Army Corps of Engineers.

(e) Such development will not cause or contribute to subsidence hazards unless it is determined that adequate measures will be undertaken to prevent damage from such subsidence.

(f) With respect to new facilities, all oilfield brines are reinjected into oil-producing zones unless the Division of Oil and Gas of the Department of Conservation determines to do so would adversely affect production of the reservoirs and unless injection into other subsurface zones will reduce environmental risks. Exceptions to reinjections will be granted consistent with the Ocean Waters Discharge Plan of the State Water Resources Control Board and where adequate provision is made for the elimination of petroleum odors and water quality problems.

Where appropriate, monitoring programs to record land surface and near-shore ocean floor movements shall be initiated in locations of new large-scale fluid extraction on land or near shore before operations begin and shall continue until surface conditions have stabilized. Costs of monitoring and mitigation programs shall be borne by liquid and gas extraction operators.

Section 30263.

(a) New or expanded refineries or petrochemical facilities not otherwise consistent with the provisions of this division shall be permitted if (1) alternative locations are not feasible or are more environmentally damaging; (2) adverse environmental effects are mitigated to the maximum extent feasible; (3) it is found that not permitting such development would adversely affect the public welfare; (4) the facility is not located in a highly scenic or seismically hazardous area, on any of the Channel Islands, or within or contiguous to environmentally sensitive areas; and (5) the facility is sited so as to provide a sufficient buffer area to minimize adverse impacts on surrounding property.

(b) In addition to meeting all applicable air quality standards, new or expanded refineries or petrochemical facilities shall be permitted in areas designated as air quality maintenance areas by the State Air Resources Board and in areas where coastal resources would be adversely affected only if the negative impacts of the project upon air quality are offset by reductions in gaseous emissions in the area by the users of the fuels, or, in the case of an expansion of an existing site, total site emission levels, and site levels for each emmission type for which national or state ambient air quality standards have been established do not increase.

(c) New or expanded refineries or petrochemical facilities shall minimize the need for once-through cooling by using air cooling to the maximum extent

feasible and by using treated waste waters from inplant processes where feasible.

Section 30264.

Notwithstanding any other provision of this division, except subdivisions (b) and (c) of Section 30413, new or expanded thermal electric generating plants may be constructed in the coastal zone if the proposed coastal site has been determined by the State Energy Resources Conservation and Development Commission to have greater relative merit pursuant to the provisions of Section 25516.1 than available alternative sites and related facilities for an applicant's service area which have been determined to be acceptable pursuant to the provisions of Section 25516.

Section 30265.

The Legislature finds and declares all of the following:

(a) Offshore oil production will increase dramatically in the next 10 years from the current 80,000 barrels per day to over 400,000 barrels per day.

(b) Transportation studies have concluded that pipeline transport of oil is generally both economically feasible and environmentally preferable to other forms of crude oil transport.

(c) Oil companies have proposed to build a pipeline to transport offshore crude oil from central California to southern California refineries, and to transport offshore oil to out-of-state refiners.

(d) California refineries would need to be retrofitted if California offshore crude oil were to be used directly as a major feedstock. Refinery modifications may delay achievement of air quality goals in the southern California air basin and other regions of the state.

(e) The County of Santa Barbara has issued an Oil Transportation Plan which assesses the environmental and economic differences among various methods for transporting crude oil form offshore California to refineries.

(f) The Governor should help coordinate decisions concerning the transport and refining of offshore oil in a manner which considers state and local studies undertaken to date, which fully addresses the concerns of all affected regions, and which promotes the greatest benefits to the people of the state.

(Added by Ch. 1398, Stats. 1984.)

Section 30265.5.

(a) The Governor, or the Governor's designee, shall coordinate activities concerning the transport and refining of offshore oil. Coordination efforts shall consider public health risks, the ability to achieve short- and long-term air emission reduction goals, the potential for reducing California's vulnerability and dependence on oil imports, economic development and jobs, and other factors deemed important by the Governor, or the Governor's designees.

(b) The Governor, or the Governor's designee, shall work with state and local agencies, and the public, to facilitate the transport and refining of offshore oil in a manner which will promote the greatest public health and environmental and economic benefits to the people of the State.

(c) The Governor, or the Governor's designee, shall consult with any individual or organization having knowledge in this area, including, but not limited to, representatives from the following:

(1) State Energy Resources Conservation and Development Commission.

(2) State Air Resources Board.

(3) California Coastal Commission.

(4) Department of Fish and Game.

(5) State Lands Commission.

(6) Public Utilities Commission.

(7) Santa Barbara County.

(8) Santa Barbara County Air Pollution Control District.

(9) Southern California Association of Governments.

(10) South Coast Air Quality Management Districts.

(11) Oil industry.

(12) Public interest groups.

(13) United States Department of the Interior.

(14) United States Department of Energy.

(15) United States Environmental Protection Agency.

(16) National Oceanic and Atmospheric Administration.

(17) United States Coast Guard.

(d) This act is not intended, and shall not be construed, to decrease, duplicate, or supersede the jurisdiction, authority, or responsibilities of any local government, or any state agency or commission, to discharge its responsibilities concerning the transportation and refining of oil.

(Added by Ch. 1398, Stats. 1984.)

Section 30253.

New development shall:

(1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

(2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

(3) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development.

(4) Minimize energy consumption and vehicle miles traveled.

(5) Where appropriate, protect special communities and neighborhoods which, because of their unique characteristics, are popular visitor destination points for recreational uses.

Section 30254.

New or expanded public works facilities shall be designed and limited to accommodate needs generated by development or uses permitted consistent with the provisions of this division; provided, however, that it is the intent of the Legislature that State Highway Route 1 in rural areas of the coastal zone remain a scenic two-lane road. Special districts shall not be formed or expanded except where assessment for, and provision of, the service would not induce new development inconsistent with this division. Where existing or planned public works facilities can accommodate only a limited amount of new development, services to coastal dependent land use, essential public services and basic industries vital to the economic health of the region, state, or nation, public recreation, commercial recreation, and visitor-serving land uses shall not be precluded by other development.

Section 30254.5.

Notwithstanding any other provision of law, the commission may not impose any term or condition on the development of any sewage treatment plant which is applicable to any future development that the commission finds can be accommodated by that plan consistent with this division. Nothing in this section modifies the provisions and requirements of Sections 30254 and 30412.

(Added by Ch. 978, Stats. 1984.)

Section 30255.

Coastal-dependent developments shall have priority over other developments on or near the shoreline. Except as provided elsewhere in this division, coastal-dependent developments shall not be sited in a wetland. When appropriate, coastal-related developments should be accommodated within reasonable proximity to the coastal-dependent uses they support.

(Amended by Ch. 1090, Stats. 1979.)

Chapter 12.16
TREE PLANTING

Sections:

12.16.010 Planting in public parkways–Permission required.
12.16.020 Removing from public parkway–Permit required.
12.16.030 Trimming, pruning tree in public parkway–Permit required.
12.16.035 Franchise holders–Emergency trimming.
12.16.040 Beautification committee–Determination of suitable trees.
12.16.050 City manager's authority–Appeal to council.
12.16.060 Duty of abutting land owners to cultivate trees on public property.
12.16.070 Request for cooperation.
12.16.080 New subdivisions–Cost of trees paid to city.
12.16.090 Removal–Permit required.
12.16.100 Removal–Permit application.
12.16.110 Removal–City manager to inspect.
12.16.120 Removal–Provisions to be observed.
12.16.130 Stumps–Removal–Nuisance.
12.16.140 Slash removal.
12.16.150 Appeal to beautification committee.
12.16.160 Violations.

12.16.010 **Planting in public parkways – Permission required.** It shall be unlawful for any person, firm or corporation to plant, or set out, any trees in the public parkways without the written consent of the city manager. (Ord. 258 N.S., 1954: Ord. 210 N.S. § 8-3170(1), 1952).

12.16.020 **Removing from public parkway – Permit required.** It shall be unlawful for any person, firm or corporation to remove any tree, or device necessary for the protection thereof, from public parkways without securing a permit, in writing, duly authorized by the city manager. (Ord. 258 N.S., 1954: Ord. 210 N.S. § 8-3170(2), 1952).

12.16.030 **Trimming, pruning tree in public parkway – Permit required.** It shall be unlawful for any person, firm or corporation to prune, trim or in any way alter the shape or interfere with the growth of any tree in a public parkway without notifying the city manager, in writing, and securing a written permit to do so. (Ord. 258 N.S., 1954: Ord. 210 N.S. § 8-3170(3), 1952).

12.16.035 **Franchise holders – Emergency trimming.** Notwithstanding the other provisions of this chapter, duly authorized personnel of utility companies whose franchises from the city are current and in effect, may in an emergency trim trees or remove trees which are threatening to interrupt or have interrupted utility service, only to the extent necessary to alleviate

the emergency. The utility company shall report all such instances of emergency action on trees to the city manager within seventy-two hours of the event. (Ord. 817 N.S., 1974).

12.16.040 Beautification committee – Determination of suitable trees. The beautification committee shall be charged with the duty of promptly determining the types and kinds of trees and shrubs suitable and desirable for planting in the public streets, avenues, highways and parkways within the city. Such determination shall be made by the committee after consultation with competent arborists and nurserymen familiar with the subjects of such plantings. When such determination has been made by the committee, the committee shall report its determinations in writing to the city council in a report to be designated FIRST OFFICIAL TREES AND SHRUBS PLANTING LIST, PACIFIC GROVE, CALIFORNIA. The report shall be ordered placed on file in the office of the city clerk and, after such filing, the same shall be the official determination of the committee in the premises. Thereafter, the committee may from time to time file second, third, fourth, etc., reports covering the same subject, each of which shall be complete in itself and each of which shall be transmitted and filed in the office of the city clerk as in the first instance. The latest of such reports so made, transmitted and filed shall be and constitute the official list until supplanted by a subsequent list. (Ord. 817 N.S., 1974).

12.16.050 City manager's authority – Appeal to council. The city manager shall have full jurisdiction and control of the designation of kind and type, planting, setting out, location and lacement of all trees and shrubs in the public streets, avenues, highways and parkways of the city and shall likewise have supervision, direction and control of the removal, relocation and replacement thereof, provided, however, that in making such determinations and exercising such control, he shall be limited to the trees and shrubs designated on the then current official trees and shrubs planting list so prepared, transmitted and filed; and provided further that any person aggrieved by any act or determination of the city manager in the exercise of the authority herein granted, shall have the right of appeal to the beautification committee and thereafter to the city council in accordance with the procedures prescribed by Section 12.16.150. (Ord. 817 N.S., 1974).

12.16.060 Duty of abutting land owners to cultivate trees on public property. It is hereby made the duty of all owners and persons having the possession and control of real property within the city to properly cultivate, care for and maintain all trees and shrubs now or hereafter planted or set out within any of the public streets, avenues, highways and parkways planting areas immediately adjacent to their respective real properties, subject, however, to the general supervision, direction and control of the city manager as hereinabove in this chapter contemplated. (Ord. 258 N.S., 1954: Ord. 210 N.S. § 8-3170(6), 1952).

12.16.070 Request for cooperation. The city council hereby respectfully requests all property owners, citizens, and members of the public within the city to cooperate in carrying into effect and supporting the comprehensive plan for city beautification, which is contemplated by this chapter, to the end that the existing natural beauty of the city may be enhanced and made ever more evident. (Ord. 258 N.S., 1954: Ord. 210 N.S. § 8-3170(7), 1952).

12.16.080 New subdivisions – Cost of trees paid to city. Before any street improvements in any new subdivision of real property in the city are accepted by the city council, the subdivider shall pay to the City of Pacific Grove the total cost of all trees to be planted along all streets in said subdivision. After receipt of said payment, the city will plant said trees at the proper time. (Ord. 258 N.S., 1954: Ord. 210 N.S. § 8-3170(8), 1952).

12.16.090 Removal – Permit required. No person shall cut down, destroy, remove, trim substantially, or move, girdle or top any tree on other than public streets, avenues, highways and parkways of the city, with a trunk circumference of nineteen inches (48.26 centimeters) or greater, measured twenty-four inches (60.96 centimeters) above the ground, or more than five trees on one building site regardless of diameter, growing within the city, unless a permit to do so has been obtained from the city manager or his designated representative. (Ord. 940 N.S. § 1, 1977: Ord. 817 N.S., 1975).

12.16.100 Removal – Permit application. Application for the permit referred to in Section 12.16.090 shall be made to the city manager, on forms provided by him for purposes of this chapter. The fee for such permit shall be five dollars for each tree six inches or more in diameter sought to be acted upon, or group of trees if less than six inches in diameter, with a maximum fee of fifty dollars. No fee shall be required in respect of a single tree on residentially zoned property. (Ord. 940 N.S. § 2, 1977: Ord. 817 N.S., 1975).

12.16.110 Removal – City manager to inspect. The city manager, or his designated representative shall inspect the tree or trees involved and surrounding area to determine whether or not, and under what conditions, the permit should be granted. The standards to be observed in granting any permit under this chapter are as follows:

A. A tree shall not be removed or substantially trimmed for the primary purpose of securing or improving a view, or for light or air;

B. A tree which serves as a part of a windbreak system, or assists in drainage or the avoidance of soil erosion, is to be preserved if at all feasible;

C. A tree should not be removed solely because diseased if the disease is readily curable;

D. Every tree which is removed shall be replaced at the owner's expense with a tree serving a comparable use as the removed tree, to the extent feasible;

E. Trees which constitute dangers to public safety, or which by reason of disease constitute a danger to other forms of vegetation, shall be removed, trimmed or treated, whichever is appropriate;

F. All work done under a permit shall be done in a workmanlike manner. No tree shall be trimmed to an extent which destroys its identity as a tree, unless the conditions for its removal exist;

G. Trees which give aesthetic beauty to an area are to be preserved if at all feasible;

H. The city manager or his representative shall impose such conditions on the permit as he shall deem necessary to fulfill the standards herein prescribed. (Ord. 817 N.S., 1974).

12.16.120 Removal – Provisions to be observed. Where it is proposed to remove a tree or trees for purposes of erecting a structure or providing parking places or for purposes of facilitating grading or lot clearance, the following provisions shall be observed:

(a) No building or grading permit shall issue until a tree removal permit has been secured and the time for appeal thereon has expired.

(b) The applicant shall indicate on a map or plot the location of all trees on the building site, their type and trunk diameters and the trees proposed for removal. Where more than twelve trees are proposed for removal, topographical elevations shall be shown.

(c) A tree shall not be removed solely for purposes of facilitating building, grading, or clearing.

(d) The work of improvement and tree removal work shall be done in such manner as to avoid damage to the trees which are to be preserved or to the root systems thereof. Temporary barricades shall be erected around trees which are to remain. Monterey Pines shall be sprayed with an appropriate insecticide to a height of twelve feet. Any trees which are damaged during construction shall be immediately treated so that cuts are shaped properly and sealed to insure fast healing and to protect against beetle infestation.

(e) The applicant shall plant replacement trees for those removed, in such number, types, sizes, and locations as prescribed in the permit.

(f) The building inspector shall from time to time inspect the tree removal and work of improvement to assure the carrying out of the terms of the permit.

(g) The applicant shall post a bond with the city on which he shall forfeit five hundred dollars for each tree which is removed or substantially damaged above those permitted to be removed, and providing the city with adequate indemnity to replace the number and type of trees required to be replaced by his permit. (Ord. 873 N.S. § 1. 1976; Ord. 817 N.S., 1974).

12.16.130 Stumps – Removal – Nuisance. No person shall leave any portion of a tree stump above the ground for more than thirty days after the tree has been cut if such stump remains visible as a stump to public view. All tree stumps which are visible above the ground level as a stump to public

view, are nuisances which may be abated in the manner prescribed by law. (Ord. 817 N.S., 1974).

12.16.140 **Slash removal.** Any felled trees, slash, removed tree limbs, or other portions of any tree on the ground shall be removed promptly and in no case shall such be left on the ground for more than thirty days. The provisions of this section shall not apply to cut wood, provided that such cut wood shall not be allowed to rest against or touch any standing tree. Violations of this section are nuisances which may be abated in the manner prescribed by law. (Ord. 817 N.S., 1974).

12.16.150 **Appeal to beautification committee.** Any person who disagrees with any action of the city manager or his designated representative in denying or issuing any such permit may appeal to the beautification committee, in which case such matter shall be scheduled for hearing by the committee within thirty days after the filing thereof. Action under any permit, the issuance of which has been appealed, shall be suspended pending decision of the committee on the appeal. The committee may set any such appeal for public hearing, giving such notice to the public or to the persons concerned as the committee deems advisable. Following the hearing of any such appeal, the committee may affirm, reverse or modify the action of the city manager and may take any action thereon which would have been authorized in the first intance. The action of the committee on any such appeal is subject to review and approval by the city council. (Ord. 817 N.S., 1974).

12.16.160 **Violations.** Any person who violates any of the provisions of this chapter or any of the conditions of any permit issued hereunder is guilty of a misdemeanor. Each tree removed, destroyed, or disfigured shall constitute a separate violation. The minimum fine for each violation of this chapter shall be fifty dollars. (Ord. 940 N.S. § 3, 1977: Ord. 817 N.S., 1974.)

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I. INTRODUCTION

The Asilomar Dunes form the western portion of the City of Pacific Grove. The white-sand beaches and dunes, along with the extensive stand of Monterey pines, combine to make Asilomar an area of world renown.

In addition to Monterey pines, the Asilomar Dunes are also inhabited by a community of native dune plants and animals that are specially adapted to withstand the harsh conditions characteristic of coastal sand dunes. These conditions include exposure to high concentrations of salt, sandblasting by wind-blown sand, inundation and burial by moving sand, and extremely poor soil quality characterized by low nutrient levels and low water-retention ability. The native dune species not only tolerate these apparently unfavorable conditions, they actually thrive here.

Unfortunately, native dune species have proven less able to deal with other forces which affect the Asilomar area: impacts from human activity. These impacts result from house- and road-building, landscaping with aggressive, invasive, non-native

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plants, and trampling. In the recent past, sand mining and off-road vehicle operation also contributed to these detrimental impacts. As a result of these forces, many native dune plants and animals have been threatened with extinction as the habitat necessary for their survival has disappeared.

Like in other coastal areas of the Monterey Bay region, development and recreational activities have significantly increased in the Asilomar Dunes area. As a result, the detrimental impacts on the natural community have greatly intensified. Several local species have become so rare that they are now protected by state law. Two plants that grow in the Asilomar Dunes are listed as "endangered" by the California Department of Fish and Game: Menzies' wallflower (*Erysimum menziesii*) and Tidestrom's lupine (*Lupinus tidestromii* var. *tidestromii*). Both are low-growing biennials (or short-lived perennials) which are known to inhabit open-sand areas. Menzies' wallflower is known to occur in only three locations in California: the Asilomar Dunes in Monterey County, the Mackerricher Dunes in Mendocino County, and the Samoa Peninsula Dunes in Humboldt County[1]. Tidestrom's lupine is known from only

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1. There is a fourth occurrence of Menzies' wallflower: in the Marina Dunes of Monterey County. These plants are currently under study, and are soon to be re-classified as a separate subspecies, different from the Menzies' wallflower populations described above.

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the Asilomar Dunes. For both species, the major threat is from loss of habitat due to human impact. Where ample habitat exists, both these species may be found in profusion.

The presence of these protected species has affected, but not eliminated, development of parcels in the Asilomar Dunes area. During the past several years, both the City and the California Coastal Commission have set special conditions for approval of coastal development permits in the Asilomar area. These conditions have included:

1) alteration of the development design to accommodate the needs of the endangered species;
2) enhancement of the habitat (by removing invasive ice plants and/or re-planting endangered species); and
3) protection of the habitat (by conservation agreement or dedication of conservation easement).

These mitigations apply only to development projects proposed for portions of the Asilomar Dunes area that are inhabited by endangered species or contain environmentally sensitive dune habitat. Such parcels were identified in a report entitled "Habitat Sensitivity and Identification" prepared for the City by Bruce Cowan in 1981. That report classified the coastal zone of Pacific Grove into areas of varying sensitivity (Appendix 1).

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Currently, the City requires that a botanical survey be conducted on parcels which contain extremely sensitive ("A-1") or highly sensitive ("B-2" or "B-3") dune habitat, as described in the Cowan (1981) report. This policy is also mandated in the City's Local Coastal Program Land Use Plan[2].

During the past several years, more than a dozen botanical surveys have been conducted in the Asilomar Dunes area as part of this process. These surveys have varied significantly in their methodology, level of detail, timing, and accuracy. In addition, some of the surveys were submitted to the City while others were submitted to the Coastal Commission; there is no single repository for all of them. This hinders researchers trying to understand the health of the endangered species community in the Asilomar Dunes (which, for Tidestrom's lupine, represents its only known habitat in the world). It also hinders planners from understanding how these endangered species are affected by the cumulative impacts of development throughout the Asilomar Dunes area. These reports could help provide a regional perspective, which is an invaluable tool in the management of endangered species and their required habitat.

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2. Adopted September 16, ~~1976~~ 1987 J.M. Sec. 2.3.4. #4, p.13.

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II. PURPOSE OF STUDY

This study was commissioned by the City of Pacific Grove to provide information regarding the status of endangered species and their required habitat in the Asilomar Dunes area. The study area consisted of 96[3] privately-owned parcels bounded on the east by Asilomar Blvd., on the west by the shoreline, on the north by Lighthouse Ave., and on the south by the Asilomar State Conference Grounds.

The goals of the study were:

1. To update the "Habitat Sensitivity and Identification" study prepared by Cowan (1981).
2. To assess each parcel in the study area for the presence or absence of Tidestrom's lupine and Menzies' wallflower, as well as for the habitat potential.
3. To recommend which parcels would require a botanical survey, should they be subject of a development permit.
4. To recommend standards for botanical surveys.
5. To recommend mitigation policy standards.

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3. The Asilomar Dunes study area is actually comprised of 102 parcels; in the present study parcels 007-021-05,-06,-07,-09, -10,-11, and -12 were treated as one parcel because they are under one ownership and their boundaries are not readily discernible.

III. SURVEY METHODS

The study was conducted during the period of April 18 to June 1, 1988. Before the study began, the Director of the Pacific Grove Community Development Department sent a letter to each property owner in the study area (Appendix 2). This letter described the study and asked for property owners' cooperation. The mailing also included a stamped, pre-addressed post card which could be returned by those residents who objected to the presence of the surveyor on their property (Appendix 3). The letter stated that unless a post card was received by the City by April 13, 1988, then the property owner's "acknowledgment and consent will be assumed."

In spite of this stated assumption, no survey of any already-developed property was made without first obtaining permission from the property owner or resident. Whenever possible, properties were surveyed from the street or from an adjoining lot, in order to avoid disturbing the property resident.

During the study, major physical and biological features of each parcel were described. These features included the location of large areas of landscaping, paving, tree-cover, invasive exotics, native dune plants, and open-sand. The presence and general location of any endangered species (Tidestrom's lupine

and Menzies' wallflower) were recorded, but the exact number of plants was not counted. Finally, each parcel was classified according to Cowan's Habitat Sensitivity Identification rating system (HSI). All these observations were designed to provide City planners with a characterization of each parcel, to help determine which parcels required botanical surveys (if development permits were ever sought), and to develop a framework for understanding the extent of endangered plants in the Asilomar Dunes. A more-detailed survey was beyond the scope of this report.

IV. RESULTS AND DISCUSSION

A. Property Owner Response

Of the letters sent to the owners of 96 parcels in the Asilomar Dunes study area, 19 cards were returned denying property entry to the surveyor ("No Permission To Enter": 20%), 11 cards were returned requesting that the property owner be present when the study was conducted ("Conditional Permission": 11%), and six cards were returned undelivered by the U.S. Postal Service ("No Information": 6%). Of those parcels with returned cards, ten of the "No Permission To Enter" parcels were surveyed from either the street or a neighboring parcel or with information provided from a previous study (Appendix 4), all of the "Conditional Permission" parcels were surveyed when the property owner was present, and two of the "No Information" parcels were surveyed after the owner was contacted, and one was described using information from a previous survey (Appendix 5). This information is summarized in Table 1 below.

TABLE 1 - PARCELS SURVEYED

Total Parcels:	96	
No Permission To Enter:	-19	
	+10	(Surveyed)*
Conditional Permission:	-11	
	+11	(Surveyed)
Cards Returned Undelivered:	-6	
	+3	(Surveyed)**
Total Parcels Surveyed:	84	
Parcels Not Surveyed:	12	

* Includes 2 parcels previously surveyed
** Includes 1 parcel previously surveyed

B. Parcel Classification - HSI

All but 14 of the 96 parcels in the Asilomar Dunes study area were assigned habitat ratings based on Cowan's "Habitat Sensitivity and Identification" rating system (Appendix 6). Of the 82 parcels classified, 59 of them were given multiple ratings, reflecting different conditions on different portions of the parcel. There were 57 parcels classified as extremely sensitive (A-1) and/or highly sensitive (B-2, B-3) habitat. Of the 14 parcels not classified, ten were parcels for which no permission was given for entry, and four were parcels without any residents at home when the study occurred.

In determining a parcel's habitat classification, the absence of endangered plants did not automatically eliminate that property as having potential endangered species habitat. If classification had been based solely on the presence or absence of endangered plants, then a surveyor might conceivably give a low rating to a parcel which, in reality, actually possessed endangered species or their required habitat. This could occur in a number of ways:

1. Endangered plants could be overlooked by the surveyor. These plants are small and may be difficult to see. Menzies' wallflower, for example, is often found growing in close proximity to beach sagewort (*Artemisia pycnocephala*), and small wallflower seedlings may be hidden from view. In addition, some surveyors may be unfamiliar with the appearance of these plants as young seedlings. At least one survey previously submitted to the City confused Tidestrom's lupines with seedlings of other dune species.
2. Weather conditions could result in an early or late growing season (possibly caused by an unusually dry or wet year). This could affect the number of flowering plants seen by the surveyor. This might also increase the number of seedlings observed, which might, as mentioned above, be mis-identified by inexperienced surveyors.
3. Deer predation might severely reduce the number of endangered plant flowers or disfigure the plants, making them difficult to identify.

With these considerations in mind, habitat classifications were determined based on characteristics of the habitat as well as on the presence or absence of endangered species.

C. Endangered Species

Endangered plants were found on 50 different parcels in the Asilomar Dunes study area (Appendix 8). Tidestrom's lupine was found on 49 of these parcels, and Menzies' wallflower was found on four[4] of them (co-occurring with Tidestrom's lupine on three parcels). Many of these parcels represented excellent, archetypal habitat: dunes with a sparse cover of native dune plants and with few, if any, areas of invasive Hottentot-fig ice plant.

Several other parcels contained areas of excellent habitat alongside of areas of poor habitat; on these parcels, the poor habitat areas often represented a potential threat to the excellent habitat (e.g. invasive ice plant, extension of forest cover, increased weed growth in dune habitat resulting from watering and fertilizing of adjacent landscaped areas).

In addition, many parcels were found to have endangered Tidestrom's lupine growing in areas which represented less-than-excellent habitat. On several of these parcels, the plants were found growing in very small areas of open sand, surrounded by large masses of ice plant; on other parcels, they were found growing alongside the edge of the road, amid broken pieces of pavement.

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4. Information about two of these parcels (007-041-27 and 007-041-28) was gathered in a previous survey.

D. Parcels Requiring Botanical Surveys

Based on the results of the present study, as well as data supplied from previous surveys, a total of 77 parcels are recommended to have botanical surveys conducted, should any of them be considered for a development permit (Appendix 9). These 77 parcels include the 50 on which endangered plants were found, plus 11 parcels on which no endangered species were found but that were rated as A-1, B-2, or B-3, along with eight parcels with other HSI ratings but containing small areas of potential habitat, and eight parcels that were not surveyed during this study and for which no accurate data could be located (Appendix 10). These results are summarized in Table 2 below.

TABLE 2 - SURVEY RESULTS

	# Parcels
# In Asilomar Dunes Study Area	96
# Surveyed	82
# Not Surveyed	14
# w/ Endangered Species	50
# Rec'd for Botanical Survey (w/ Endangered Species)	50
# Rec'd for BotSurv (no Endangered Species, but A1,B2,B3)	11
# Rec'd for BotSurv (no Endangered Species, but other desigs).	8
# Rec'd for BotSurv (lack of information)	8
Total # Rec'd for BotSurv	77
Total # Not Rec'd for BotSurv	19

Of all the parcels in the Asilomar Dunes study area, it is recommended that 19 of them not require botanical surveys for endangered species (Appendix 11). Most of these parcels are characterized mainly as heavily forested areas. Here, the thick tree canopy and the solid ground cover of sedge or ice plant combine to make the habitat unsuitable for both Tidestrom's lupine and Menzies' wallflower.

While these parcels now appear to be free of either endangered species or their potential habitat, it should be noted that the border between the forest and dune is a dynamic feature. Pine trees may eventually spread westward into the open dunes, reducing endangered species habitat. Conversely, dunes may move inland, covering and/or replacing portions of the forest cover with wind-blown sand; this process may be accelerated by conditions which adversely affect Monterey pines in this area, including salt spray and beetle infestation, both of which reduce the pines' ability to hold-off the advancing dune. As the dune/forest boundary changes, potential endangered species habitat may be created or eliminated. This continuing process may have a direct effect on many parcels in the eastern portion of the Asilomar Dunes area, including several large parcels which extend from heavily forested areas near Asilomar Blvd. westward to open dune areas inhabited by either endangered species or their habitat.

A few of the parcels were excluded from needing future botanical surveys because of conditions other than possessing a thick pine forest. In these cases, decisions that the habitat could not support endangered species were made with great care. As described above,

Tidestrom's lupine and Menzies' wallflower are endangered not because of any inherent weakness of the species, but mainly because of the disappearance of their required habitat. Some parcels appeared, at first glance, to lack potential endangered species habitat; closer inspection, however, located limited areas that were occupied by endangered species. A few parcels, for example, were nearly completely covered with Hottentot-fig ice plant (*Carpobrotus edulis*), but Tidestrom's lupines were found growing in small areas of open-sand scattered amid the ice plant. While it is possible that continued growth of ice plant could eventually overwhelm the endangered lupines, it is also possible that open-sand areas in the ice plant cover will continue to expand, providing new habitat. African ice plant scale, an insect which feeds on ice plant, is found throughout the Asilomar Dunes and may eventually produce more patchiness in the ice plant cover, creating more endangered species habitat.

The changes in habitat just described (movement of the forest/dune boundary and increase or decrease of ice plant cover) illustrate the problems which arise when dealing with an area that is affected by dynamic human and natural forces. Any change that affects the presence or absence of habitat potential affects more than endangered species: it also affects the property owner. It is the presence or absence of habitat potential that determines if a parcel needs to be surveyed, and it is the results of this survey that help determine what mitigations are to be required. Clearly, these factors have significant financial consequences for the

property owner. In view of the financial and ecological impact of these changing conditions, it is recommended that the present survey be repeated at 5-year intervals.

V. RECOMMENDATIONS

A. Standards For Botanical Surveys

In past years, botanical surveys of the Asilomar Dunes area have varied in scope, method, and accuracy. In order to provide maximum protection for both the fragile dune habitat and for property owners, the City should set reasonable standards for the conduct of botanical surveys. These standards will also ensure that the City will be provided with enough accurate information necessary for decision making.

1. Botanical surveys must be performed by qualified persons.

In the past, surveys were conducted by persons who mis-identified the endangered species. (At certain stages, Menzies' wallflower may be difficult to distinguish from other native seedlings, e.g. beach primrose, *Camissonia cheiranthifolia*, and beach dandelion, *Agoseris apargioides*). Other times, those conducting surveys have trampled many of the small, fragile seedlings they have been counting.

The Pacific Grove Local Coastal Program Land Use Plan states that botanical surveys required for development permit approval shall be conducted "... by a qualified botanical expert selected from a list to be maintained by the City, in consultation with the Museum of Natural History" (Sec. 2.3.4 #4, p.13). While no criteria have been set to determine level of expertise, it is recommended that the survey be conducted by persons who can demonstrate proficiency either by their

education, training, or experience. It is recommended that a list be compiled of persons who have already submitted botanical surveys to the City who meet these criteria; persons not on the list should be required to submit, in writing, a resumé of their experience, to the Director of the Museum of Natural History, who should be given the authority to expand the list.

2. Botanical surveys for endangered species must be conducted during the appropriate time of year.

For Tidestrom's lupine and Menzies' wallflower, the prime blooming period extends from late winter (beginning of March) through mid-summer (end of July). This period may be skewed earlier or later, depending on weather conditions. Surveys conducted very early or very late in the blooming season may detect some of these plants, but cannot provide an accurate characterization of the endangered species or the habitat at the parcel.

3. Botanical surveys should include more than just a species list.

Among local experts, there is some difference of opinion regarding how detailed the survey should be. Most agree, however, that there is no need to count each endangered plant seedling on the parcel. Vern Yadon, Director of the Pacific Grove Museum of Natural History, states that many of these seedlings may not survive from year-to-year (both species are biennial, or short-lived perennials) and recommends that only plants with flowers be counted (rather than count the number of flowering heads). Others, however, recommend that all seedlings at least be taken into consideration, to be used as an index of the health (and potential) of the habitat.

It is recommended that botanical surveys contain the following elements:

a. The survey results should be marked on an accurate map of the parcel which depicts topographic contours.

The map should accurately show the location of "endangered species envelopes" (areas within which these species occur), along with a count of the number of endangered flowering plants observed and an estimate of the number of endangered seedlings, within each envelope. The accurate location of the endangered species envelopes is especially critical, because it may be used to determine where development can or cannot be allowed.

b. The survey should represent a complete study of the parcel, rather than an extrapolation of data gathered by transect or quadrat analysis.

This is recommended because the small size of most parcels in the Asilomar Dunes area allows detailed study without unreasonable expenditure of time.

c. The survey should include, in the accompanying report, a characterization of the potential endangered species habitat(s) on the parcel.

This should include a description of such elements as:

1) estimated % native plant cover;
2) estimated % open sand; and
3) estimated % invasive plant cover.

as well as any other significant factors.

d. The survey report should discuss direct and indirect threats to the endangered species on the parcel.

These should include, but not be limited to:

1) threats from invasive plants (including Hottentot-fig ice plant);
2) threats from movement of unstable wind-blown sand;
3) threats from development (including changes in drainage patterns, amount of shade cast onto the dunes, and even predation of dune plants by garden snails attracted to landscape plants);
4) threats from deer predation; and
5) threats from human trampling.

e. The survey report should recommend mitigations which will offset detrimental impacts of the proposed development.

These may include, but not be limited to:

1) analysis of how the proposed development will affect sensitive dune habitat, including assessment of such impacts as changes in drainage, changes in shading, etc.
2) establishment of buffer zones between developed areas and natural habitat areas; and
3) establishment of conservation easements or deed restrictions to protect sensitive areas, including endangered species habitats;

4. Botanical surveys should be conducted in a manner which has the least detrimental impact on the native plant community at the site.

Those who conduct the botanical surveys should take care to avoid damage to the dune vegetation, especially the fragile seedlings of the endangered species. No collection of any endangered species should be allowed without a Memorandum of Understanding from the California Department of Fish and Game.

5. Botanical surveys should be used to provide planners with an understanding of the cumulative impacts of development in the Asilomar Dunes area.

While each report should provide in-depth information about conditions on a given parcel under consideration for development, the data in these reports may be assembled and assessed to provide much more. To enhance this potential, the City should collect and maintain a complete set of all

botanical surveys conducted in the Asilomar area. These may be obtained from the Coastal Commission, the Department of Fish and Game (Endangered Plant Program), and the Department of Parks and Recreation, as well as from private consultants.

The Community Development Department should file these reports according to the parcel's Assessor's Parcel Number. In the future, information from these reports could be incorporated into computerized records for each parcel. However, it is recommended that this be done cautiously, in view of the variable nature of previous surveys. Perhaps the best way to deal with these older reports would be to assess them completely, allowing consideration of such factors as time and method of study and experience of observer.

6. Botanical surveys should be distributed to agencies and organizations that approve coastal development permits for areas with sensitive environmental habitats.

Copies of each botanical survey should be distributed to:

Pacific Grove Community Development Department
300 16th Street
Pacific Grove, CA 93950

California Coastal Commission
701 Ocean Street, Room 310
Santa Cruz, CA 95060

California Department of Fish and Game
Endangered Plant Program
1416 9th Street
Sacramento, CA 95814

In addition, a copy should be sent to:

Pacific Grove Museum of Natural History
165 Forest Avenue
Pacific Grove, CA 93950

B. Mitigations For Development Permits

As the pressure for development of coastal areas has increased during recent years, governmental regulatory agencies have allowed development in coastal dunes on the condition that negative impacts resulting from the development be mitigated in some way. While these mitigations can never result in a pristine dune habitat, they can significantly enhance conditions, as long as they are thoughtfully planned, regularly monitored, and stringently enforced. The following guidelines are recommended:

1. **Mitigations in the Asilomar Dunes area should involve both protection of undisturbed habitat and enhancement (restoration) of disturbed habitat.**

   Protection of existing, undisturbed habitat should be the highest goal of the planning process. Undisturbed habitat is a known factor: it exists, it works. Restoration techniques must still be considered experimental. Restoration can increase the ecological value of already disturbed land, but should not be used in equal trade for development of undisturbed land.

   Undisturbed habitat may be protected in several ways. Areas can be set aside as oper. space easements or conservation easements. These can be protected from further development as well as from adverse human impacts (e.g. damage from trampling, pets, use of herbicides and pesticides, etc.). To ensure the continued management and maintenance of the easement, even if the property changes hands, the agreement

should be a deed restriction, recorded with the county recorder's office. In some cases, it may be possible to have the easement managed by an outside agency, such as a land trust or a dune protection district (see #7 below).

Wherever possible, development should be sited away from undisturbed habitat. This can be achieved by modifying building designs to avoid direct and indirect adverse impacts that could result from such factors as changes in drainage, significant increase in shade, etc.

In addition, steps should be taken to ensure that undisturbed dune areas are protected from damage during construction. These may include:

a. use of drift ("snow") fencing to protect undisturbed dune habitat as well as endangered species habitat from damage during construction; and
b. disposal of construction wastes at an approved off-site location.

To ensure implementation of construction-phase mitigation measures, the City should require a pre-construction meeting for the purpose of explaining all necessary environmental protection measures, along with a construction-phase monitoring program, conducted by a qualified person, to verify that all agreed-upon provisions are met. The monitoring need not be extensive, but should involve site visits during the major phases of construction. As described below, damage to

the undisturbed habitat will be the responsibility of the property owner, and must be repaired in a prompt and competent manner. Damage to endangered species, or their required habitat, may be subject to penalties from appropriate government protection agencies (California Department of Fish and Game, U.S. Fish and Wildlife Service).

Further protection of undisturbed dunes could be achieved by appropriate use of fencing and boardwalks, which can reduce, though not totally eliminate, adverse human impacts.

Enhancement of disturbed habitat should entail the removal of exotic, invasive plants such as Hottentot-fig ice plant (*Carpobrotus edulis*), European beach grass (*Ammophila arenaria*), and Pampas grass (*Cortaderia jubata*) which are a threat to the native dune plant and animal habitats.

Removal of these invasive plants should be performed in a manner which is both safe and long-lasting. Use and disposal of all herbicides (e.g. "Round-Up") must strictly follow all directions enclosed by the manufacturer, as well as any special conditions set by the Monterey County Health Department. Special attention must be paid to such factors as herbicide dilution and concentration, air temperature, and wind force and direction. Special steps may need to be taken to protect adjacent dune areas from damage by these herbicides.

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Removal of exotic invasives must also deal with potential problems from re-growth of unwanted seedlings during the next growing season, as well as wind erosion of dune sand after the exotic-plant cover has been removed. These problems have been met with varying degrees of success in the Asilomar Dunes area.

Enhancement of disturbed dunes also involves restoration of native dune species. When combined with removal and control of exotic invasives, dune restoration can help the native habitat to recover from the effects of detrimental impacts. While restored dunes cannot be classified as pristine, they can represent, nonetheless, a much higher quality habitat than did the disturbed dunes. In enhancing habitat values, successful restoration also helps these species regain a portion of their former ("historic") range. As with the removal of exotics described above, dune restoration in the Asilomar Dunes area has also had variable success. Guidelines for dunes restoration are discussed in the sections that follow.

2. Mitigations should be clearly described and easily verifiable.

Development-related mitigations should involve specific goals to be achieved during a specified time period. When goals are vague, success cannot be measured. A mitigation requiring that a developer simply "restore the habitat" is too general to be enforced. These goals may deal with projected species composition and densities of native plants to be restored, allowable densities of exotic invasives (preferably, as low as possible), or methods for preventing the disturbance of protected or restored dunes. These goals will serve as the criteria to be assessed by the monitor.

3. Restoration of disturbed habitat must include only species native to the Asilomar Dunes.

It is critical that native plants used in restoration be specific for the Asilomar Dunes. In the Monterey Bay coastal dunes, for example, some restoration projects have introduced exotic species along with native plants. Some exotics such as statice (*Limonium* sp.), introduced by the California Department of Transportation (CalTrans) in the dunes along Highway 1 through the City of Marina, are a minor but unnecessary nuisance. Others, like Hottentot-fig ice plant (*Carpobrotus edulis*) and European beach grass (*Ammophila arenaria*), are extremely invasive, and can outcompete and eventually replace native dune plants, including those serving as habitat for native animals. Unfortunately, many of these exotics have already been introduced into the Asilomar Dunes.

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Other plants have been used in dune landscaping projects that were native California species, but not native to the specific area involved. During the landscaping of the Highway 1 dunes in Marina described above, CalTrans used the common bright orange California poppy (*Eschscholzia californica*), apparently without realizing that the proper plant to use in the Marina Dunes should have been the coastal variety (*E. californica* var. *maritima*), which is predominantly yellow.

In another project, Menzies' wallflowers from the Marina Dunes were used in a landscape project located in coastal dunes in the Pebble Beach area. The wallflowers from Marina have different growth characteristics than those found in Asilomar, and they are soon to be described as a different subspecies. While neither of the last two examples represent a threat to their respective dune ecosystems, the introduction of these species does represent an unfortunate oversight as well as a violation of the basic tenets of restoration.

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4. **Mitigation agreements must be accompanied by a long-term monitoring program.**

This is a critical aspect of any mitigation-implementation agreement, because it is the only way to verify if the property owner is meeting the agreed-upon terms. While monitoring might seem intrusive, it should be remembered that these mitigations have been promised by the property owner in return for a development permit. Many of these promised mitigations (e.g. ice plant control, native plant restoration, dune protection) are long-term processes, and a long-term monitoring program is the only way to verify that these promises have been (or are being) kept.

The success of the monitoring will be based, in part, on the clarity and specificity of the mitigation goals and criteria, as described above. In view of the potential for controversy, these criteria must be clearly stated in order to describe to the monitor what conditions must be observed and measured. Some conditions will be easy to verify (e.g. the existence of an intact fenceline or the lack of invasion by aggressive exotics). However, an agreement that requires a property owner to maintain a viable population of Menzies' wallflowers, may be more difficult to verify. What constitutes a viable population? Does the agreement specify a minimum threshold number of these plants which must be maintained, or does it only describe an area that must be set aside and protected? How should the monitor deal with *natural* problems (e.g. adverse weather, deer predation)? These may constitute

threats to the restoration project, but they are clearly beyond the control of the property owner. Clear restoration criteria are essential. They benefit the property owner, the monitor, and the habitat.

5. Mitigation agreements must include an established mechanism for correcting problems reported by the monitor.

Problem-correction responsibilities might range from repairing a fence to eradicating re-growth of invasive exotics to replanting native species in a restoration area that failed to meet the established criteria. Correction of such problems must be performed according to procedures described in the original agreement. If methods for removal of invasive exotics and planting of appropriate native species were described in the original mitigation agreement, then these same methods should be used as necessary to correct any problems reported by the monitor. The following examples illustrate how such problem-solving could be accomplished:

a. If the needed repairs involve replanting Menzies' wallflower, then the revegetation methods might include collecting seeds only from local dunes, then outplanting seedlings during late fall to early winter, without use of artificial irrigation.

b. If ice plant must be stopped before it can encroach on a newly restored area, then it might be necessary to remove the ice plant by hand, wherever it is found growing within five feet of any restoration or undisturbed dune area, rather than spraying it with an herbicide.

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This portion of the mitigation agreement should clearly assign responsibility for correcting problems. If the property owner is to be responsible, then the terms of the agreement should be recorded as a deed restriction, which will automatically pass to the new owner whenever the property changes hands. This will clearly establish legal responsibility, and will be helpful in situations where a cooperative owner sells the property to someone with less environmental sensitivity.

6. Mitigation agreements must be enforceable.

Mitigation implementation agreements are often violated, sometimes accidentally, sometimes purposely. There must be an effective method to ensure that violations are redressed. This must be done in a prompt and competent manner, if environmental damage is to be kept to an absolute minimum. If the responsible party is unwilling to take the necessary corrective actions, in the manner described in the mitigation agreement, then there several mechanisms available which can relieve the immediate problem:

a. Cash Deposits/Performance bonds

These may be used to assure that contractors' work will meet specific quality standards. The deposit or bond can be held until the finished project has been inspected and given final approval. This mechanism can be helpful when

the responsible party fails to perform an agreed-upon task necessary to the long-term success of the mitigation agreement.

b. Penalties/Fines

A mitigation agreement can provide for specific fines if established criteria are not met. For example, the developer of a desert resort near Tucson, Arizona agreed to protect saguaro cactuses in the development area. During construction, price tags were hung on each cactus warning construction crews how much would be charged for damage to the vegetation.[5] To be used most effectively, fines should be imposed in addition to the cost of correcting the problem.

c. Liens

Another available mechanism is the placement of a lien against the responsible party's property in order to pay for necessary actions. This can be carried out by the City.

All of these mechanisms are most effective if the mitigation criteria, the responsibilities of all parties, and the mechanisms for problem correction are clearly described in the mitigation agreement. Any response which falls short of these standards must constitute a violation of the agreement.

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5. Patrick Phillips "Fitting in: A desert resort respects its environment." Urban Land Vol.45, No.6, June, 1986.

7. Success of mitigation agreements is best accomplished through the establishment of an implementation program with long-term funding.

An implementation program will help guarantee that long-term mitigation goals can be achieved. In addition, an implementation program may be designed to lessen the financial burden on individual property owners. This could apply to the Asilomar Dunes where many property owners could conceivably need restoration and monitoring services.

An Asilomar Dunes Resource Protection District could be formed to provide services such as native dune plant restoration expertise, native dune plant seeds and seedlings ("greenhouse support"), and monitoring. Such a district could be modeled after the dune preservation district concept described by Nordstrom and Psuty in 1980[6]. This district could be supported by fees charged to property owners in the area. Additional funds could be sought from government resource protection agencies like the California Department of Fish and Game and the U.S. Fish and Wildlife Service), from the California State Coastal Conservancy, as well as from private foundations and land trusts. During the past several years, these organizations have become increasingly aware that long-term habitat maintenance is as important as habitat acquisition.

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6. Karl F. Nordstrom and Norbert P. Psuty "Dune district management: A framework for shorefront protection and land use control." Coastal Zone Management Journal Vol.7, No.1, 1980.

VI. CONCLUSION

Coastal dunes represent one of the most fragile natural environments in the world. While the native plants of this community are able to tolerate extreme physical and biological conditions, they are extremely vulnerable to human-caused impacts. Over the years, these impacts have been so detrimental that some of the species which inhabit the Asilomar Dunes may be threatened with extinction.

In recent years, pressures for both development and protection of the Asilomar Dunes have created controversy and confusion. This report recommends steps that can be taken by the City which will allow both development as well as protection. In order to achieve this goal, the City's policies must be clearly stated and enforceable. Property owners should be informed that their parcels will require special steps in order to be approved for development. As described above, these steps will include submittal of a botanical survey performed by a qualified person at the appropriate season. To reduce costs and frustrations of modifying building designs, it is recommended that the botanical survey be conducted before building design begins.

When a proposed development is identified as having impacts that can potentially affect sensitive coastal dune habitat, the City is mandated by state law[7] to require that those impacts be

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7. California Environmental Quality Act (CEQA) and the California Coastal Act

mitigated, as a condition of permit approval. The mitigations should be aimed at reducing damage to undisturbed habitat, by means of proper location of development, or by establishment of easements; eliminating disturbance to endangered species as well as to their required habitat; and enhancing the quality of disturbed habitat, through removal and control of exotic invasive plants and through replanting and restoration of appropriate native dune flora. Because these mitigations are long-term, and are dependent on such factors as plant growth and control of human behavior, it is critical that all agreed-upon mitigations be enforced in an effective and reasonable manner. This can be achieved through means such as legally binding agreements, yearly monitoring, and financial guarantees. Though these recommendations may seem intrusive, they will help ensure that promises made between property owners and the City can be kept. If these promises are forgotten, both the environment and the character of the Asilomar Dunes suffer, and the public trust is violated.

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Appendix 1

HABITAT SENSITIVITY AND IDENTIFICATION RATINGS
(after Cowan, 1981)

A. **Extreme sensitivity.** Fragile natural plant communities and landforms; endangered native plant species known or very likely to occur.

1. Sand dunes, usually with 50% to 100% native plant cover, relatively undisturbed.

B. **High Sensitivity.** Remnant fragile natural plant communities; sensitivity due in part to fragile nature of landforms; endangered plant species probably no longer occurring but could potentially be restored to suitable habitats.

2. Sand dunes with less than 50% native plant cover, partially disturbed, with predominantly exotic plant cover (ice plant, weeds, acacias).

3. Severely disturbed sand dunes with little remaining plant cover and subject to wind erosion and migration.

4. Coastal bluffs with remnant fragile native shrublet and wildflower communities.

5. Coastal bluff areas largely denuded of vegetation, but undergoing or subject to severe erosion or breakdown from heavy foot or vehicular traffic.

C. **Moderate sensitivity.** Natural or landscaped plant cover, not as fragile as above, but unable to withstand unrestricted human impact; endangered native plant species not likely to occur.

6. Coastal bluffs or meadows with substantial native plant cover (coyote bush, sedges).

7. Coastal bluffs or residential lots artificially landscaped and maintained, with exotic shrubs, flowers, and groundcovers.

8. Monterey pine forest with native (mostly sedge) understory.

D. **Low sensitivity.** No valuable or fragile plant communities; no endangered species.

9. Coastal bluffs with heavy, continuous exotic (ice plant) cover.

10. Rocky bluffs with little or no vegetation.

11. Sandy intertidal beaches.

12. Maintained lawn and turf.

13. Weedy waste places.

Appendix 2

LETTER TO RESIDENTS

Appendix 3

RESIDENT RETURN POST CARD

Appendix 4

PARCELS WITHOUT PERMISSION TO ENTER PROPERTY

Parcel #	HSI	Notes
007-041-05	?	not surveyed
007-041-21	?	not surveyed
007-041-22	?	not surveyed
007-041-25	?	not surveyed
007-041-27	B2/C6	not surveyed, data from previous survey[z]
007-041-28	A1/B2/C6	not surveyed, data from previous survey[z]
007-061-12	A1/B2	viewed from street[zz]
007-061-14	B2/C8	viewed from street and adjacent lot[zz]
007-061-25	?	not surveyed
007-061-30	?	not surveyed
007-061-34	?	not surveyed
007-061-40	B2,3	viewed from adjacent lot[zz]
007-061-43	?	not surveyed
007-071-02	A1/B2/C7	viewed from adjacent lot[zz]
007-071-04	?	viewed from adjacent lot[zz]
007-071-07	+	viewed from adjacent lot[zz]
007-072-07	-	not surveyed
007-072-09	+	not surveyed, data from previous survey[z]
007-072-13	+	viewed from adjacent lot[zz]

[z] Endangered species reported in previous survey.
[zz] Endangered species observed from off-site.

Appendix 5

PARCELS WITH LETTERS UNDELIVERED

Parcel #	Surveyed	LUTI/ERME	HSI	Notes
007-031-07	+	- / -	C8	1 small open-sand area
007-031-08	+	- / -	C8	pines/ice plant
007-041-03	+	- / -	C6,8	pines/landscaped
007-061-18	-	? / ?	?**	not surveyed (NAH), LUTI on adjacent lots
007-072-18	-	? / ?	?**	not surveyed (NAH), LUTI on adjacent lot
007-072-22	+	+ / -	A1/B2, B3/C8	good habitat; previously surveyed

** Needs botanical survey, in spite of HSI
LUTI = Tidestrom's lupine (*Lupinus tidestromii*)
ERME = Menzies' wallflower (*Erysimum menziesii*)
HSI = Habitat Sensitivity and Identification rating (after Cowan, 1981)
NAH = Resident Not At Home

Appendix C: Asilomar Dunes Habitat Survey with Policy Recommendations

Final Report

ASILOMAR DUNES HABITAT SURVEY WITH POLICY RECOMMENDATIONS

Submitted to

City of Pacific Grove

Community Development Department

By

David Shonman
Coastal Biologist
P.O. Box 238
Pacific Grove, CA
93950

October 11, 1988

Appendix 6

PARCEL LIST

APN	Surveyed	Endangered Species LUTI/ERME	HSI	Notes
007-021-05*	+	+ / -	B2/C6	good habitat in few open-sand areas
007-021-06*				
007-021-07*				
007-021-09*				
007-021-10*				
007-021-11*				
007-021-12*				

* Parcels 007-021-05,-06,-07,-09,-10,-11, and -12 were treated as one parcel: they are contiguous without distinct property boundaries, and are currently under the same ownership.

ERME = Menzies' wallflower (*Erysimum menziesii*)

LUTI = Tidestrom's lupine (*Lupinus tidestromii*)

HSI = Habitat Sensitivity and Identification rating (after Cowan, 1981)

Appendix 6 (continued)

PARCEL LIST

APN	Surveyed	Endangered Species LUTI/ERME	HSI	Notes
007-031-04	+	- / -	C8	pines/ice plant/ natives
007-031-05	+	- / -	C8	pines/ice plant/ weeds
007-031-07	+	- / -	C8	1 small open-sand area
007-031-08	+	- / -	C8	pines/ice plant
007-031-09	+	- / -	C8	pines/ice plant
007-031-10	+	- / -	C7	LUTI on adjacent lot, viewed from adjacent lot + street
007-031-13	+	- / -	D9**	LUTI on adjacent lot; potential habitat if ice plant opens
007-031-14	+	+ / -	D9**	LUTI in open-sand area
007-031-15	+	- / -	C7**	LUTI on adjacent lot; potential habitat in open-sand areas
007-031-16	+	- / -	C7	totally landscaped
007-031-17	+	- / -	C8/D9	pines/ice plant
007-031-18	+	- / -	C8/D9	pines/ice plant

ERME = Menzies' wallflower (*Erysimum menziesii*)
LUTI = Tidestrom's lupine (*Lupinus tidestromii*)
HSI = Habitat Sensitivity and Identification rating (after Cowan, 1981)
** Needs botanical survey, in spite of HSI

Appendix 6 (continued)

PARCEL LIST

APN	Surveyed	Endangered Species LUTI/ERME	HSI	Notes
007-041-01	+	- / -	C7,8/ D12	pines/ice plant/landscaped
007-041-03	+	- / -	C6,8	pines/landscaped
007-041-04	+	- / -	C6,8	few open-sand areas
007-041-05	-	? / ?	?**	not surveyed (NP)
007-041-07	+	+ / -	B2/C7	few open-sand areas
007-041-08	+	- / -	C8**	few open-sand areas, LUTI on adjacent lot
007-041-09	+	- / -	B2	large open-sand area, LUTI on adjacent lot
007-041-10	+	- / -	B2/C8/ D9	pines/ice plant, LUTI on adjacent lot
007-041-11	+	+ / -	B2/C8/ D9	ice plant/pines, few LUTI
007-041-12	+	+ / -	A1/B2	ice plant, LUTI in open-sand
007-041-14	+	- / -	C6,8	pines/sedge/coyote bush
007-041-15	+	- / -	B2	ice plant/open sand
007-041-16	+	- / -	C7,8	trees/ice plant/no open sand

NP = No Permission to Enter Property
ERME = Menzies' wallflower (*Erysimum menziesii*)
LUTI = Tidestrom's lupine (*Lupinus tidestromii*)
HSI = Habitat Sensitivity and Identification rating (after Cowan, 1981)
** Needs botanical survey, in spite of HSI

PARCEL LIST

APN	Surveyed	Endangered Species LUTI/ERME	HSI	Notes
007-041-18	+	- / -	C7	landscaped/weeds/no open sand
007-041-19	+	- / -	C6,8	pines/no open sand
007-041-20	+	- / -	C6**	few open sand-areas
007-041-21	-	? / ?	?**	not surveyed (NP)
007-041-22	-	? / ?	?**	not surveyed (NP)
007-041-23	+	- / -	B2/C6,7	ice plant/no open sand habitat potential very low
007-041-24	+	- / -	C6,7, 8**	pines/weeds/landscaped, few open sand areas
007-041-25	-	? / ?	?**	not surveyed (NP)
007-041-27	-	+ / +	B2/C6	previously surveyed (NP)
007-041-28	-	+ / +	A1/B2/ C6	previously surveyed (NP)
007-041-29	+	? / ?	B2/C6	viewed from street (NAH), LUTI on adjacent lot

NP = No Permission to Enter Property
NAH = Resident Not at Home
ERME = Menzies' wallflower (*Erysimum menziesii*)
LUTI = Tidestrom's lupine (*Lupinus tidestromii*)
HSI = Habitat Sensitivity and Identification rating (after Cowan, 1981)
** Needs botanical survey, in spite of HSI

Appendix 6 (continued)

PARCEL LIST

APN	Surveyed	Endangered Species LUTI/ERME	HSI	Notes
007-061-01	+	+ / -	B2,3/ C6	several open sand-areas
007-061-03	+	+ / -	B2/C8	good open-sand habitat
007-061-05	+	- / -	B2/C7, C8	few open-sand areas
007-061-06	+	- / -	B2/C7, C8	few open-sand areas
007-061-07	+	- / -	B2/C8	few open-sand areas, LUTI on adjacent lot
007-061-08	+	+ / ?	B2,3	viewed from adjacent lot
007-061-09	+	+ / ?	B2,3/ C7,8	viewed from adjacent lot
007-061-10	+	+ / ?	B2/C7, C8	viewed from adjacent lot
007-061-11	+	+ / -	A1/B2	good habitat
007-061-12	+	+ / ?	A1/B2	viewed from street (NP)
007-061-14	+	+ / ?	B2/C8	viewed from adjacent lot and street (NP)
007-061-15	+	+ / -	B2,3	pines/ice plant/large open-sand area

NP = No Permission to Enter Property
NAH = Resident Not at Home
ERME = Menzies' wallflower (*Erysimum menziesii*)
LUTI = Tidestrom's lupine (*Lupinus tidestromii*)
HSI = Habitat Sensitivity and Identification rating (after Cowan, 1981)
** Needs botanical survey, in spite of HSI

PARCEL LIST

APN	Surveyed	Endangered Species LUTI/ERME	HSI	Notes
007-061-16	-	? / ?	?**	not surveyed (NAH), LUTI on adjacent lots
007-061-18	-	? / ?	?**	not surveyed (NAH), LUTI on adjacent lots
007-061-19	+	+ / -	B2,3/ C8	large open-sand areas
007-061-20	+	+ / -	B3	large open-sand area
007-061-23	+	+ / -	B2	few open sand areas
007-061-24	+	+ / -	B2	several open-sand areas
007-061-25	-	? / ?	?**	not surveyed (NP), LUTI on adjacent lot
007-061-29	+	- / -	B2,3	several open-sand areas/ LUTI on adjacent lot
007-061-30	-	? / ?	?**	not surveyed (NP), LUTI on adjacent lots
007-061-31	+	- / +	B2/C8	large open-sand area, with ERME
007-061-32	+	+ / -	A1/B2/ C7	viewed from adjacent lot, good open-sand habitat
007-061-34	-	? / ?	?**	not surveyed (NP), LUTI on adjacent lots
007-061-35	+	+ / -	A1/B2	few open-sand areas

NP = No Permission to Enter Property
ERME = Menzies' wallflower (*Erysimum menziesii*)
LUTI = Tidestrom's lupine (*Lupinus tidestromii*)
HSI = Habitat Sensitivity and Identification rating (after Cowan, 1981)
** Needs botanical survey, in spite of HSI

Appendix 6 (continued)

PARCEL LIST

APN	Surveyed	Endangered Species LUTI/ERME	HSI	Notes
007-061-36	+	+ / -	A1/B2	good habitat
007-061-40	+	+ / ?	B2,3	viewed from adjacent lot (NP), good habitat
007-061-41	+	+ / -	B2,3/ C6	several open-sand areas
007-061-42	+	+ / +	?**	not fully surveyed (NAH), viewed from driveway, LUTI and ERME on lot
007-061-43	-	? / ?	?**	not surveyed (NP), LUTI on adjacent lot
007-061-44	+	- / -	C8	pines/ice plant
007-061-45	+	- / -	C8	pines/ice plant/grass

NP = No Permission to Enter Property
NAH = Resident Not at Home
ERME = Menzies' wallflower (*Erysimum menziesii*)
LUTI = Tidestrom's lupine (*Lupinus tidestromii*)
HSI = Habitat Sensitivity and Identification rating (after Cowan, 1981)
** Needs botanical survey, in spite of HSI

Appendix 6 (continued)

PARCEL LIST

APN	Surveyed	Endangered Species LUTI/ERME	HSI	Notes
007-071-02	+	+ / ?	A1/B2, C8	viewed from adjacent lot (NP), good habitat
007-071-03	+	+ / -	A1/B2/ C7	large open-sand area
007-071-04	+	+ / ?	?**	viewed from adjacent lot (NP), LUTI on adjacent lot
007-071-05	+	+ / -	A1/B2, B3/C7	good habitat
007-071-07	+	+ / ?	B2/C6	viewed from adjacent lot (NP), few open-sand areas
007-071-09	+	+ / -	B2/C6	few open-sand areas
007-071-10	+	+ / -	B2	few open-sand areas, large acacia grove
007-071-11	+	+ / -	B2/C8	few open-sand areas
007-071-12	+	+ / -	B2/C7	surveyed from street/ few open-sand areas

NP = No Permission to Enter Property
ERME = Menzies' wallflower (*Erysimum menziesii*)
LUTI = Tidestrom's lupine (*Lupinus tidestromii*)
HSI = Habitat Sensitivity and Identification rating (after Cowan, 1981)
** Needs botanical survey, in spite of HSI

Appendix 6 (continued)

PARCEL LIST

APN	Surveyed	Endangered Species LUTI/ERME	HSI	Notes
007-072-01	+	+ / -	B2,3	viewed from street, large open-sand area
007-072-03	+	+ / -	B2,3/ C8	good habitat, large open-sand areas
007-072-05	+	+ / -	A1/B2/ C8	good habitat
007-072-06	+	+ / -	A1/B2 C8	good open-sand habitat in western portion
007-072-07	-	? / ?	?**	not surveyed (NP)
007-072-09	+	+ / -	A1,B2	previously surveyed (NP)
007-072-11	+	+ / -	B2/C6	ice plant/sedge/ few open-sand areas with LUTI
007-072-12	+	- / -	B2/C7	LUTI on adjacent lot (parcel boundaries not clear)
007-072-13	+	+ / ?	A1/B2, B3	viewed from adjacent lot (NP), large open-sand area
007-072-14	+	+ / -	B2/C8	good habitat, several LUTI planted by owner
007-072-16	+	+ / -	A1/B2	good habitat, previously surveyed
007-072-18	-	? / ?	?**	not surveyed (NAH), LUTI on adjacent lot
007-072-19	+	+ / -	A1/B2/ C8	good habitat, LUTI transplanted

NP = No Permission to Enter Property
NAH = Resident Not at Home
ERME = Menzies' wallflower (*Erysimum menziesii*)
LUTI = Tidestrom's lupine (*Lupinus tidestromii*)
HSI = Habitat Sensitivity and Identification rating (after Cowan, 1981)
** Needs botanical survey, in spite of HSI

Appendix 6 (continued)

PARCEL LIST

APN	Surveyed	Endangered Species LUTI/ERME	HSI	Notes
007-072-20	+	- / -	C8	pines/ice plant/grass
007-072-21	+	+ / ?	A1/B2, B3	owner opposed to survey after observations began
007-072-22	+	+ / -	A1/B2, B3/C8	good habitat, previously surveyed
007-072-23	+	+ / -	A1	good habitat
007-072-24	+	+ / -	A1/B2,3	(NAH), previously surveyed

NAH = Resident Not at Home
ERME = Menzies' wallflower (*Erysimum menziesii*)
LUTI = Tidestrom's lupine (*Lupinus tidestromii*)
HSI = Habitat Sensitivity and Identification rating (after Cowan, 1981)

Appendix 7

PARCELS NOT SURVEYED

APN	Surveyed	Endangered Species LUTI/ERME	HSI	Notes
007-041-05	-	? / ?	?**	no permission to enter property
007-041-21	-	? / ?	?**	no permission to enter property
007-041-22	-	? / ?	?**	no permission to enter property
007-041-25	-	? / ?	?**	no permission to enter property
007-041-27	-	+ / +	B2/C6	no permission to enter property data from previous survey
007-041-28	-	+ / +	A1/B2/ C6	no permission to enter property data from previous survey
007-061-16	-	? / ?	?**	resident not at home, LUTI on adjacent lots
007-061-18	-	? / ?	?**	resident not at home, LUTI on adjacent lots
007-061-25	-	? / ?	?**	no permission to enter property LUTI on adjacent lot
007-061-30	-	? / ?	?**	no permission to enter property LUTI on adjacent lots
007-061-34	-	? / ?	?**	no permission to enter property LUTI on adjacent lots
007-061-43	-	? / ?	?**	no permission to enter property LUTI on adjacent lot
007-072-07	-	? / ?	?**	no permission to enter property
007-072-18	-	? / ?	?**	resident not at home, LUTI on adjacent lot

** Needs botanical survey, in spite of HSI
ERME = Menzies' wallflower (*Erysimum menziesii*)
LUTI = Tidestrom's lupine (*Lupinus tidestromii*)

Appendix 8

PARCELS WITH ENDANGERED SPECIES

Parcel #	LUTI/ERME
007-031-05/12*	+ / -
007-031-14	+ / -
007-041-07	+ / -
007-041-11	+ / -
007-041-12	+ / -
007-041-27	+ / +
007-041-28	+ / +
007-061-01	+ / -
007-061-03	+ / -
007-061-08	+ / -
007-061-09	+ / -
007-061-10	+ / -
007-061-11	+ / -
007-061-12	+ / -
007-061-14	+ / -
007-061-15	+ / -
007-061-19	+ / -
007-061-20	+ / -
007-061-23	+ / -
007-061-24	+ / -
007-061-31	- / +
007-061-32	+ / -
007-061-35	+ / -
007-061-36	+ / -
007-061-40	+ / -
007-061-41	+ / -
007-061-42	+ / +
007-071-02	+ / -
007-071-03	+ / -
007-071-04	+ / ?
007-071-05	+ / -
007-071-07	+ / -
007-071-09	+ / -
007-071-10	+ / -
007-071-11	+ / -
007-071-12	+ / -
007-072-01	+ / -
007-072-03	+ / -
007-072-05	+ / -
007-072-06	+ / -
007-072-09	+ / -
007-072-11	+ / -
007-072-13	+ / -
007-072-14	+ / -
007-072-16	+ / -
007-072-19	+ / -
007-072-21	+ / -
007-072-22	+ / -
007-072-23	+ / -
007-072-24	+ / -

* Parcel 007-021-05/12 includes parcels 007-021-05,-06,-07,-09, -10,-11, and -12: these parcels are contiguous without readily discernible boundaries, and are currently under the same ownership.

ERME = Menzies' wallflower (*Erysimum menziesii*)
LUTI = Tidestrom's lupine (*Lupinus tidestromii*)

Appendix 9

PARCELS RECOMMENDED FOR BOTANICAL SURVEY

Parcel #	LUTI/ERME	HSI
007-021-05/12*	+ / -	B2/C6
007-031-13	- / -	D9**
007-031-14	+ / -	D9**
007-031-15	- / -	C7**
007-041-05	? / ?	?**
007-041-07	+ / -	B2/C7
007-041-08	- / -	C8**
007-041-09	- / -	B2
007-041-10	- / -	B2/C8/D9
007-041-11	+ / -	B2/C8/D9
007-041-12	+ / -	A1/B2
007-041-15	- / -	B2
007-041-20	- / -	C6**
007-041-21	? / ?	?**
007-041-22	? / ?	?**
007-041-23	- / -	B2/C6,7
007-041-24	- / -	C6,7,8**
007-041-25	? / ?	?**
007-041-27	+ / +	B2/C6
007-041-28	+ / +	A1/B2/C6
007-041-29	? / ?	B2/C6
007-061-01	+ / -	B2,3/C6
007-061-03	+ / -	B2/C8
007-061-05	- / -	B2/C7,8
007-061-06	- / -	B2/C7,8
007-061-07	- / -	B2/C8
007-061-08	+ / -	B2,3
007-061-09	+ / -	B2,3/C7,8
007-061-10	+ / -	B2/C7,8
007-061-11	+ / -	A1/B2
007-061-12	+ / -	A1/B2
007-061-14	+ / -	B2/C8
007-061-15	+ / -	B2,3
007-061-16	? / ?	?**
007-061-18	? / ?	?**
007-061-19	+ / -	B2,3/C8
007-061-20	+ / -	B3
007-061-23	+ / -	B2
007-061-24	+ / -	B2
007-061-25	? / ?	?**
007-061-29	- / -	B2,3
007-061-30	? / ?	?**
007-061-31	- / +	B2/C8
007-061-32	+ / -	A1/B2/(
007-061-34	? / ?	?**
007-061-35	+ / -	A1/B2
007-061-36	+ / -	A1/B2
007-061-40	+ / -	B2,3
007-061-41	+ / -	B2,3/C(
007-061-42	+ / +	?**
007-061-43	? / ?	?**
007-071-02	+ / -	A1/B2,(
007-071-03	+ / -	A1/B2/(
007-071-04	+ / ?	?**
007-071-05	+ / -	A1/B2,3
007-071-07	+ / -	B2/C6
007-071-09	+ / -	B2/C6
007-071-10	+ / -	B2
007-071-11	+ / -	B2/C8
007-071-12	+ / -	B2/C7
007-072-01	+ / -	B2,3
007-072-03	+ / -	B2,3/C8
007-072-05	+ / -	A1/B2/C
007-072-06	+ / -	A1/B2/C
007-072-07	? / ?	?**
007-072-09	+ / -	A1,B2
007-072-11	+ / -	B2/C6
007-072-12	- / -	B2/C7
007-072-13	+ / -	A1/B2,3
007-072-14	+ / -	B2/C8
007-072-16	+ / -	A1/B2
007-072-18	? / ?	?**
007-072-19	+ / -	A1/B2/C8
007-072-21	+ / -	A1/B2,3
007-072-22	+ / -	A1/B2,3
007-072-23	+ / -	A1
007-072-24	+ / -	A1/B2,3

* Parcel 007-021-05/12 includes parcels 007-021-05,-06,-07,-09, -10,-11, and -12: these parcels are contiguous without readily discernible boundaries, and are currently under the same ownership.

** Needs botanical survey, in spite of HSI

LUTI = Tidestrom's lupine (*Lupinus tidestromii*)

ERME = Menzies' wallflower (*Erysimum menziesii*)

HSI = Habitat Sensitivity and Identification rating (after Cowan, 1981)

Appendix 10

PARCELS RECOMMENDED FOR BOTANICAL SURVEY WITH HSI RATINGS OTHER THAN A-1, B-2, AND B-3

Parcel #	LUTI/ERME	HSI	Reason
007-031-13	- / -	D9	LUTI on adjacent lot, parcel has potential habitat if ice plant pattern changes.
007-031-14	+ / -	D9	parcel has LUTI in open-sand area.
007-031-15	- / -	C7	LUTI on adjacent lot, parcel has potential habitat in open-sand area.
007-041-05	? / ?	?	parcel not surveyed (NP).
007-041-08	- / -	C8	LUTI on adjacent lot, parcel has potential habitat in open-sand areas.
007-041-20	- / -	C6	parcel has habitat potential in few open-sand areas.
007-041-21	? / ?	?	parcel not surveyed (NP).
007-041-24	- / -	C6,7,8	parcel has habitat potential in few open-sand areas.
007-041-25	? / ?	?	parcel not surveyed (NP).
007-061-16	? / ?	?	parcel not surveyed (NAH).
007-061-18	? / ?	?	parcel not surveyed (NAH).
007-061-25	? / ?	?	parcel not surveyed (NP), LUTI on adjacent lot.
007-061-30	? / ?	?	parcel not surveyed (NP), LUTI on adjacent lot.
007-061-34	? / ?	?	parcel not surveyed (NP), LUTI on adjacent lot.
007-061-42	+ / +	?	parcel not fully surveyed (NAH), but LUTI and ERME observed on lot.
007-061-43	? / ?	?	parcel not surveyed (NP), LUTI on adjacent lot.
007-071-04	+ / ?	?	parcel not surveyed (NP), but LUTI observed on lot from offsite.
007-072-07	? / ?	?	parcel not surveyed (NP).
007-072-18	? / ?	?	parcel not surveyed (NAH), LUTI on adjacent lot.

LUTI = Tidestrom's lupine (*Lupinus tidestromii*)
ERME = Menzies' wallflower (*Erysimum menziesii*)
HSI = Habitat Sensitivity and Identification rating (after Cowan, 1981)
NP = No Permission to Enter Property
NAH = Resident Not At Home

Appendix 11

PARCELS NOT RECOMMENDED FOR BOTANICAL SURVEY

Parcel #	HSI	Notes
007-031-04	C8	pines/ice plant/natives
007-031-05	C8	pines/ice plant/weeds
007-031-07	C8	1 small open-sand area
007-031-08	C8	pines/ice plant
007-031-09	C8	pines/ice plant
007-031-10	C7	LUTI on adjacent lot, viewed from adjacent lot and street
007-031-16	C7	totally landscaped
007-031-17	C8/D9	pines/ice plant
007-031-18	C8/D9	pines/ice plant
007-041-01	C7,8/D12	pines/ice plant/landscaped
007-041-03	C6,8	pines/landscaped
007-041-04	C6,8	few open-sand areas
007-041-14	C6,8	pines/sedge/coyote bush
007-041-16	C7,8	trees/ice plant/no open
007-041-18	C7	landscaped/weeds/no open sand
007-041-19	C6,8	pines/no open sand
007-061-44	C8	pines/ice plant
007-061-45	C8	pines/ice plant/grass
007-072-20	C8	pines/ice plant/grass

HSI = Habitat Sensitivity and Identification rating (after Cowan, 1981)



GUIDELINES FOR THE PROTECTION OF MONARCH BUTTERFLY OVERWINTERING SITES IN CALIFORNIA

22 June 1986

The Monarch Project
10 Southwest Ash Street
Portland, Oregon 97204
(503) 222-2788

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GUIDELINES FOR THE PROTECTION OF MONARCH BUTTERFLY OVERWINTERING SITES

Introduction

The Monarch (Danaus plexippus) is among the best known insects because of its large size, vibrant beauty and migratory habits. Its regular yearly migrations are legendary. Since they are unable to survive freezing weather the animals journey each fall to a limited number of sites possessing optimal environmental conditions on the coastline of California in the United States or in the high mountains of central Mexico. The migratory Monarchs cluster by the thousands or even millions at their overwintering sites and represent one of the greatest natural phenomena on Earth. This spectacle has been occuring for thousands of years; yet because of human interference, it may disappear in the near future unless dramatic and immediate actions are taken.

The Monarch is a member of a largely tropical group known as the Milkweed butterflies, whose scientific name is the Danaiinae. The caterpillars rely on milkweeds as their sole food source. The plants are crucial to their survival, not only for the nourishment they provide, but also for the chemicals they furnish which render the butterflies poisonous to many birds, one of their major predators. The Monarch's elaborate bird-like migratory behavior enables it to take advantage of this food supply in wide areas of North America.

There are two populations of this butterfly in North America with distinct migration routes and overwintering areas. The first uses a path east of the Rocky Mountains to reach their roosting sites high in the mountains of central Mexico. The second moves south through the Pacific states (e.g. the Great Basin, the Pacific Northwest, the Southwest, and portions of western Canada) to a limited number of sites located primarily along the coast of California.

The range of the roosting sites in western North America extends from northern Mendocino County in California southward as far as the Ensenada region of Baja California, Mexico. The total number of Monarchs overwintering in this area is unknown, but probably numbers around ten million. Each roost varies in size, but the largest documented site contained 171,000 Monarchs. Prior to 1977, it was believed that all roosts were located near the sea coast. Unexpectedly, some very small overwintering sites have recently been found in Bakersfield in the arid southern San Joaquin Valley and in the high desert near Death Valley.

The Monarch has a near worldwide distribution and is in no danger of extinction as a species. However, both the eastern and western populations are extremely vulnerable because of their overwintering strategy. Because the phenomenon of the North American migration could be lost in the near future, the conservation of the Monarch butterfly overwintering sites has been designated a top priority of the IUCN. The IUCN formed in 1948, is a worldwide network of governments, private organizations, scientists and other conservation experts which promotes scientifically based action for the protection of wild living resources. The Monarch is also listed on the international treaty known as the Convention on the Conservation of Migratory Species of Wild Animals (the "Bonn Convention").

Temporary Bivouacs and Permanent Roosts

The annual fall migration protects the Monarchs from frigid northern winters. Freezing weather is fatal to all stages of the butterfly. Clustering behavior commences as the Monarchs are migrating towards their overwintering sites. In the fall (September or October), small numbers of Monarchs begin to cluster at Temporary Bivouacs near the coast. These short term sites are probably the result of locally abundant nectar resources which the butterflies use to build up their internal fat reserves. Many of these colonies disappear in a few weeks, and the larger roosts continue to gain numbers of butterflies during this time. Presumably, with decreasing air temperatures, declining amounts of nectar and shortening day length, the small temporary sites break up and their individuals fly on to join with other butterflies in the larger Permanent Roosts which persist through the winter. Permanent Roosts are defined as those cluster sites which persist past the Winter Solstice and possess environmental conditions which allow the Monarchs to mate prior to their dispersal inland in February or March.

Permanent Roosts are typically located close to the coast usually within 1.5 kilometers of the shoreline. The sites are wooded, generally with tall and short trees as well as an understory of brush. Sometimes a clearing within a larger stand of trees is favored. The localities are well protected from winds by a combination of tree cover and topography. Gullies, canyons and lee sides of hills with good tree cover are likely areas. Clusters form from about three meters from the ground to twenty-five meters or more. There is often a stream or pond which supplies drinking water for the Monarchs, although the butterflies may also utilize morning dew. Frequently, flowering plants are found in or near the roost site and serve as a source of nectar. Adults flying on sunny days in midwinter are a sign that a colony is near by. In good weather, individuals may be seen flying short distances (up to 1 kilometer) for water or nectar, or they may simply rest on trees and shrubs in the sun, warming up to fly.

Destruction of the overwintering sites

The mild environmental conditions at the Permanent Roosts provide temperatures cool enough to keep the butterflies from using up internal fat reserves needed for the spring remigration, yet warm enough to keep them from freezing. Relatively few localities in coastal California possess these requirements. Unfortunately, a number of these sites have been eliminated and others are threatened with destruction due to both intentional and unintentional human actions.

A variety of events, primarily real estate and agricultural development, have destroyed overwintering sites in California. As houses, apartments and other structures have been built in a number of roost areas, they have forced the Monarchs to abandon the localities. Other roosts have been eliminated when the cluster trees were cleared and thinned for aesthetic reasons. The disappearance in both cases is due to alteration in the precise climatic conditions required by the overwintering Monarchs. Even though some sites are located on public land, such as military bases, nature reserves and federal, state and local parks, responsible officials are often unaware of the overwintering populations. This is because the roosts are occupied only in the fall, winter and early spring, and even if they are present, the clustered butterflies may easily be overlooked.

Important considerations in protecting and managing
Temporary Bivouacs and Permanent Roosts

1. Land use planners should exercise caution from February to September in processing development plans which would affect sites possessing the characteristics of overwintering habitats, as little evidence of the Monarchs may remain during this time.

2. Development in or near roost sites must be carefully designed so it does not adversely affect the Monarchs. The butterflies are extraordinarily sensitive to changes in microclimate and other environmental factors.

3. Construction in the vicinity of a Monarch roost should be planned so that it occurs only during the months in which the butterflies are not in residence. Roost sites that are developed should be carefully monitored to assess the effect on the Monarchs.

4. Clearing, thinning and pruning of all vegetation should be avoided or carefully managed in and around roost sites. The trees and underbrush provide a "thermal blanket" which protects the butterflies from high wind, freezing, storms and high temperatures.

The thinning of the vegetation cover or alteration of the topographic characteristics should not be undertaken, even at a distance from the site if it will alter the environmental conditons at the roost.

5. The source of drinking water used by the Monarchs should be protected. The water, preferably with seeps, sand bars or substrates which allow the Monarchs to alight and drink in full sunlight, may be supplied by a natural stream or lake or it may come from human sources, such as grass lawns in urban areas. The butterflies are also able to utilize morning dew formed on grass or other vegetation.

6. The nectar plants used by the Monarchs should be protected. Flowers provide a food source which supplements the internal fat reserves of the butterflies during the winter months. Nectaring plants commonly used by the Monarch include gum trees (Eucalyptus), Coyote bush (Baccharis), Wild Mustard (Brassica), Bottlebrush (Callistemon) and a number of other native and introduced flowering species.

7. Application of insecticides, herbicides or other toxic chemicals should be prohibited in and around roost sites.

8. Smoke from fireplace chimneys and campfires should be prohibited in and around roost sites. This pollution source adversely effects Monarchs. Smoke from wood fires causes the butterflies to drop "en masse" to the ground where they may freeze to death, get stepped on by people or be eaten by predators.

The presence of overwintering Monarchs should be considered prior to the issuance of any controlled burning permits during the months when the butterflies are in residence.

9. Public access to the Monarch overwintering sites is desirable; however, great care must be exercised to avoid disturbance of the trees and vegetational understory. Visitors must be informed of the uniqueness and fragility of the Monarchs in order to discourage thoughtless harrassment.

The theme "take nothing but pictures, leave nothing but footprints" should prevail within the roost sites. Specifically there should be no collecting of any flowers, plants or animals, no hunting or littering within this area. Taking of souvenir Monarchs should be expressly prohibited. Visitors, when inside the roost should be required to stay on predesignated and maintained trails. Tourism, camping, picnicing and parking should be carefully designed and controlled.

Serious efforts should be made to provide docent/naturalist tours and interpretive signs.

10. It is important to note that although a number of locations may appear to possess optimal conditions for overwintering Monarchs, apparently similar sites are not necessarily equivalent. This may be due to natural environmental conditions, disturbances caused by humans, or for reasons not fully understood at this time.

Some Permanent Roosts may not have all the "requirements" which characterize an optimal site; but may nevertheless be used regularly by the Monarchs.

The population size at one site may vary considerably from year to year. For example, a Permanent Roost may have ten thousand Monarchs one winter, none the next, and several hundred in the third season.

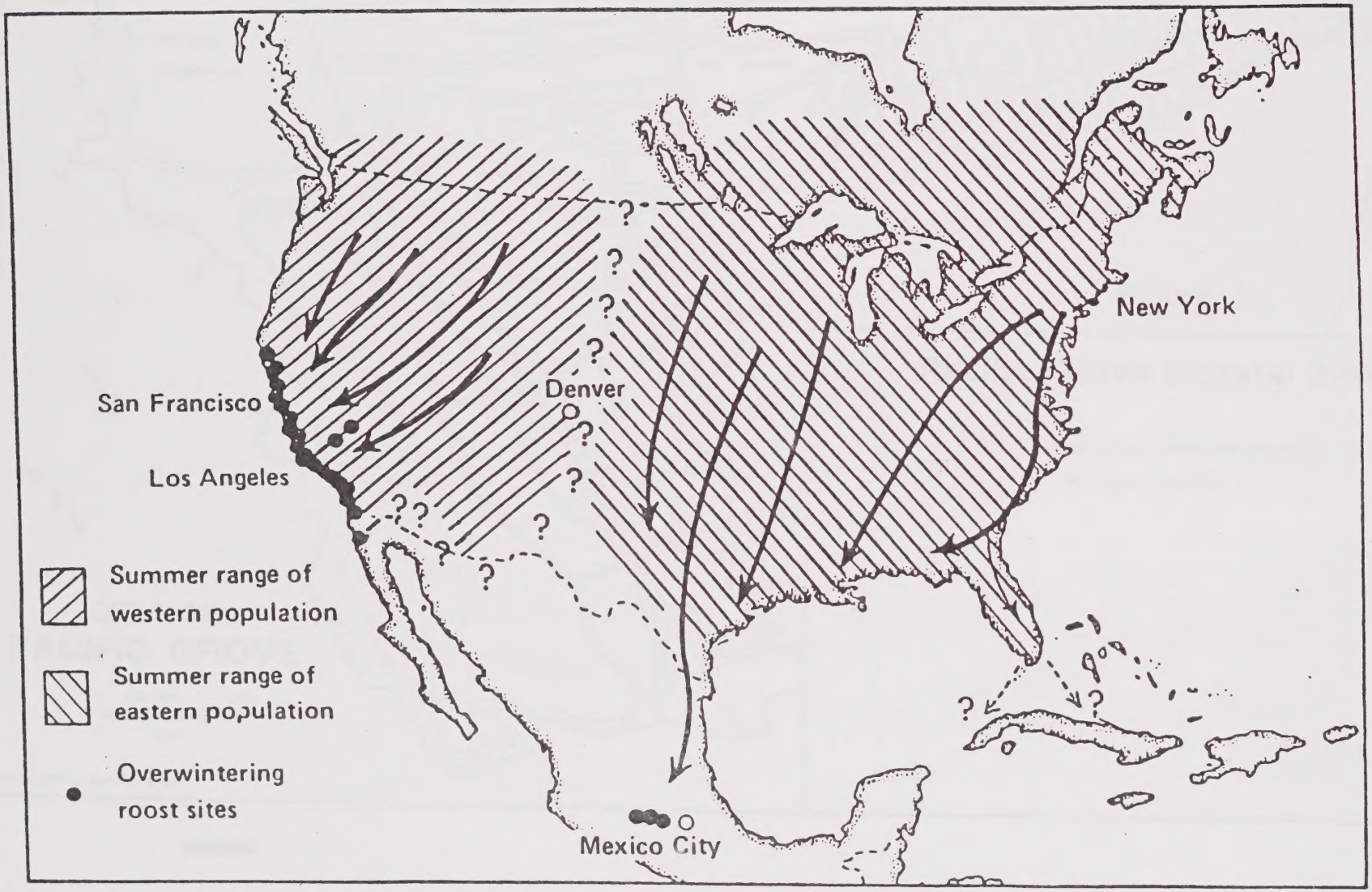
Additionally, whether a site has a Temporary Bivouac or a Permanent Roost may vary from year to year, depending on environmental, ecological and other conditions.

Blue Gum (Eucalyptus globulus), River Gum (Eucalyptus camaldulensis), Monterey Pine (Pinus radiata), and Monterey Cypress (Cupressus macrocarpa) are commonly used for clustering by the Monarchs, although a large variety of native and introduced trees are used.

Conclusion

The conservation and management of the western North American overwintering roosts of the Monarch butterfly involves the protection of a migration system which stretches thousands of miles from dry inland deserts and high mountains to the fog shrouded coastline of California. This massive annual movement of Monarchs is an event comparable to the immense mammal migration of the Serengeti Plains. The migration of this butterfly is vulnerable because the overwintering roosts are often located on sites coveted for other human uses. Even slight alterations in the precise climatic requirements of the Monarchs may render the roost unsuitable for these animals. The task of saving this phenomenon involves areas of the world undergoing rapid environmental change due to a growing human population. It involves habitat preservation where real estate values are skyrocketing. These challenges make it clear the overwintering roosts of the Monarch will be saved only through increased knowledge of the ecology and migratory behavior of the butterfly and especially through greater awareness of the need for protection by government officials and the public.

Land use planners, government officials and developers are cautioned that the Monarch butterfly is a dynamic organism. An expert should be consulted before any action is taken which may affect a site this animal is suspected to use. For more information contact: The Monarch Project, 10 Southwest Ash Street, Portland, Oregon 97204.



SUMMER RANGE AND OVERWINTERING ROOST SITES OF
THE MONARCH BUTTERFLY IN NORTH AMERICA

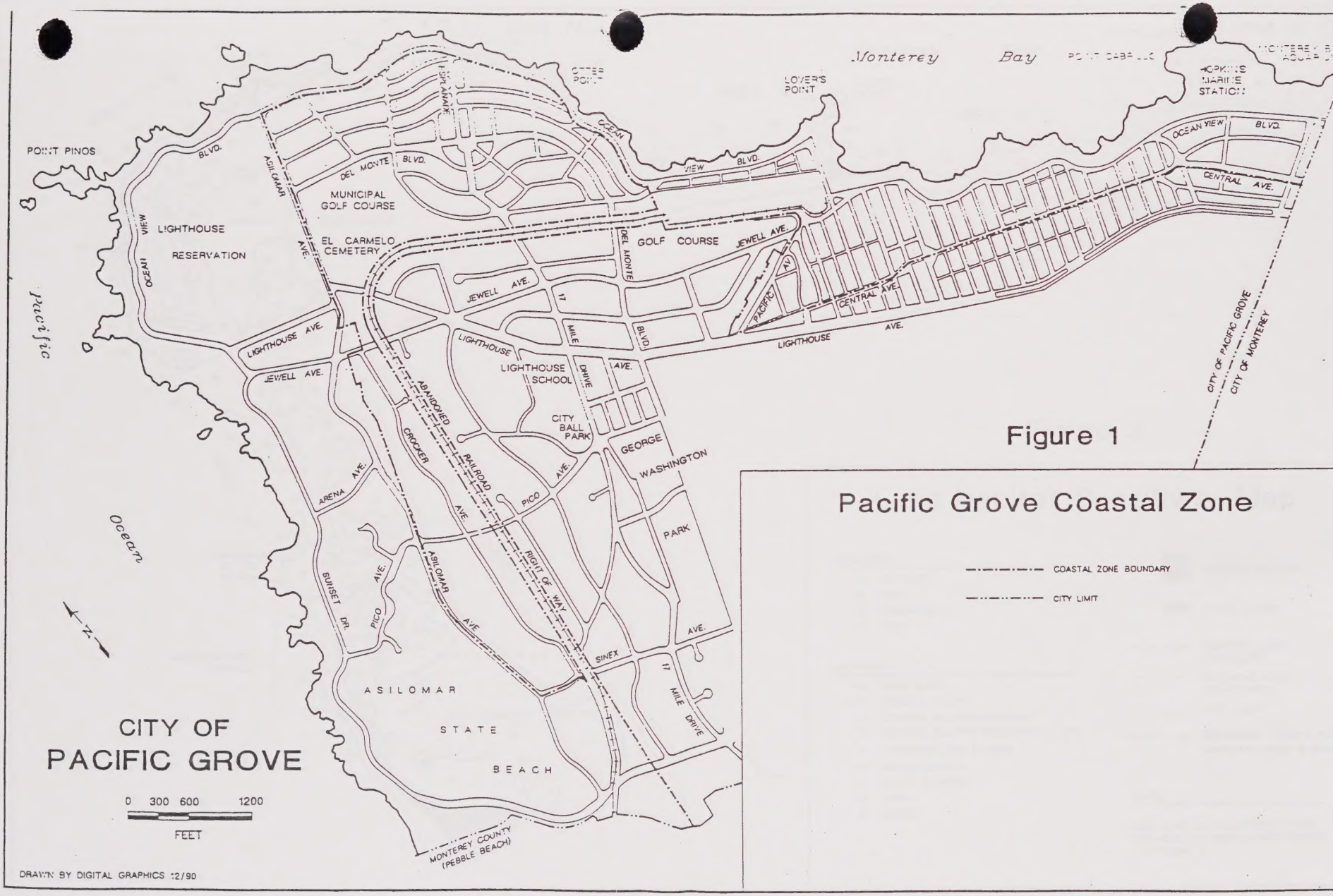


Figure 1

Pacific Grove Coastal Zone

COASTAL ZONE BOUNDARY

CITY LIMIT



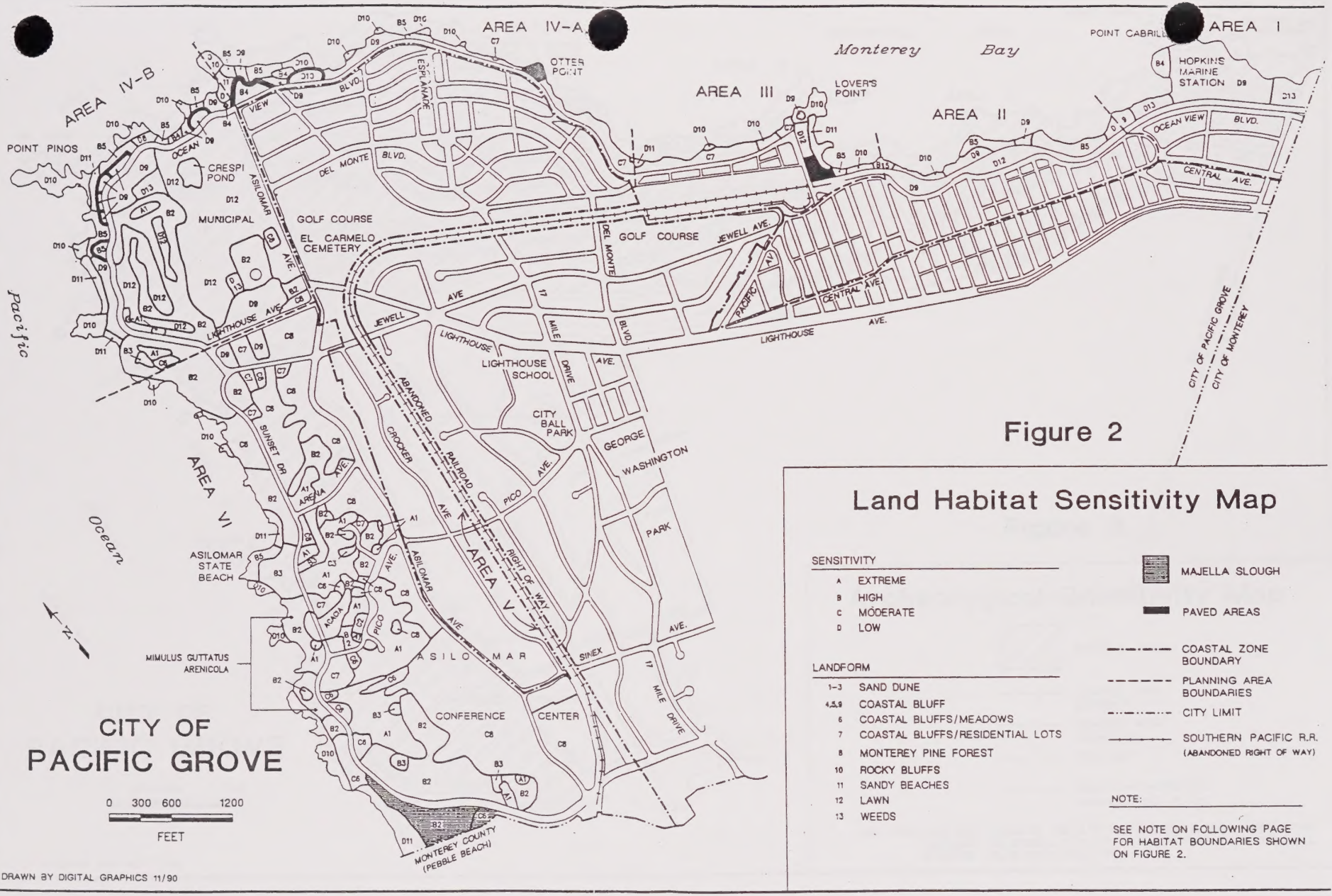


Figure 2

Land Habitat Sensitivity Map

SENSITIVITY

- A EXTREME
- B HIGH
- C MODERATE
- D LOW

LANDFORM

- 1–3 SAND DUNE
- 4,5,9 COASTAL BLUFF
- 6 COASTAL BLUFFS/MEADOWS
- 7 COASTAL BLUFFS/RESIDENTIAL LOTS
- 8 MONTEREY PINE FOREST
- 10 ROCKY BLUFFS
- 11 SANDY BEACHES
- 12 LAWN
- 13 WEEDS

- MAJELLA SLOUGH
- PAVED AREAS
- COASTAL ZONE BOUNDARY
- PLANNING AREA BOUNDARIES
- CITY LIMIT
- SOUTHERN PACIFIC R.R. (ABANDONED RIGHT OF WAY)

NOTE:

SEE NOTE ON FOLLOWING PAGE FOR HABITAT BOUNDARIES SHOWN ON FIGURE 2.

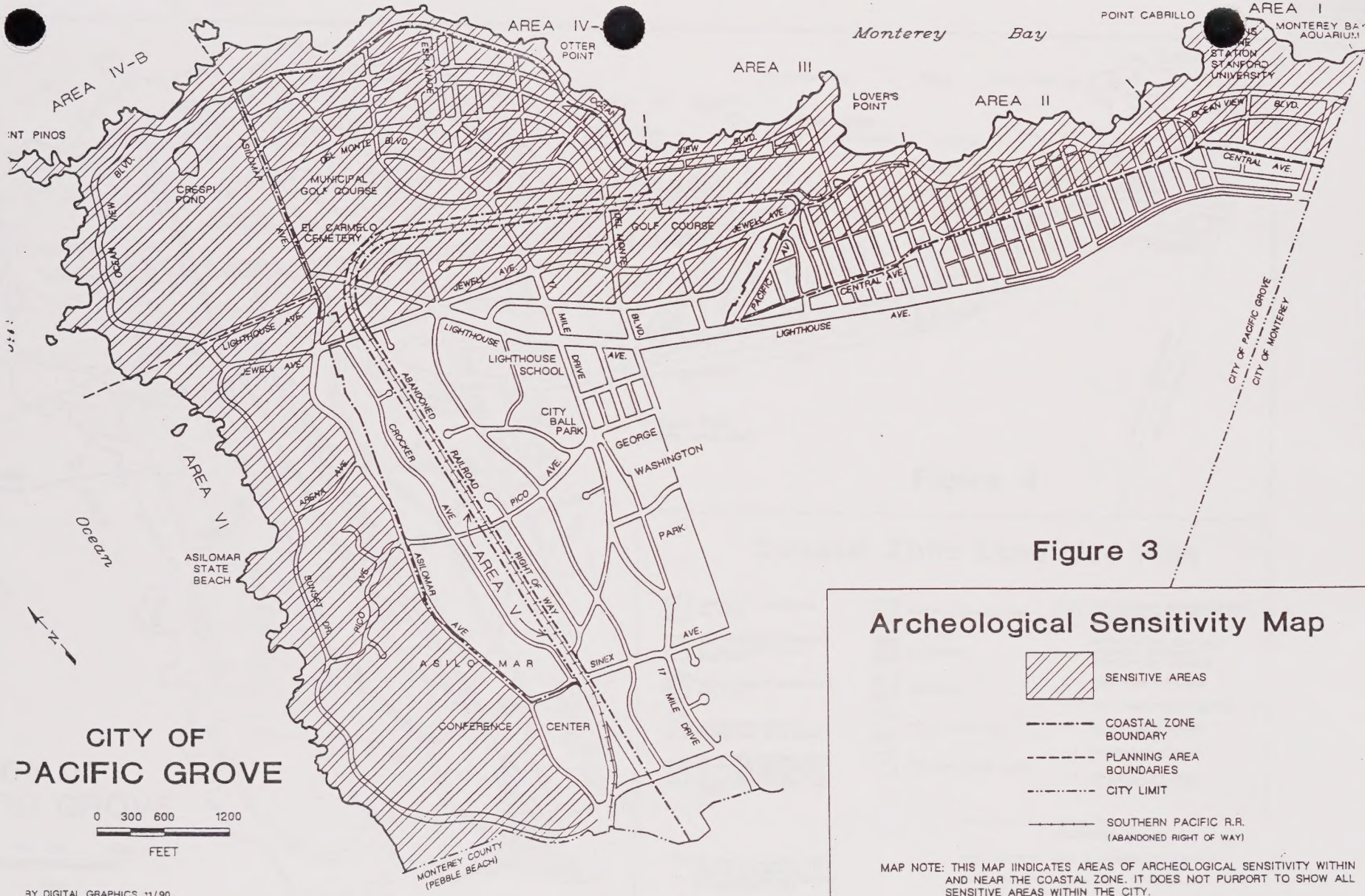


Figure 3

Archeological Sensitivity Map

- SENSITIVE AREAS
- COASTAL ZONE BOUNDARY
- PLANNING AREA BOUNDARIES
- CITY LIMIT
- SOUTHERN PACIFIC R.R. (ABANDONED RIGHT OF WAY)

MAP NOTE: THIS MAP IINDICATES AREAS OF ARCHEOLOGICAL SENSITIVITY WITHIN AND NEAR THE COASTAL ZONE. IT DOES NOT PURPORT TO SHOW ALL SENSITIVE AREAS WITHIN THE CITY.

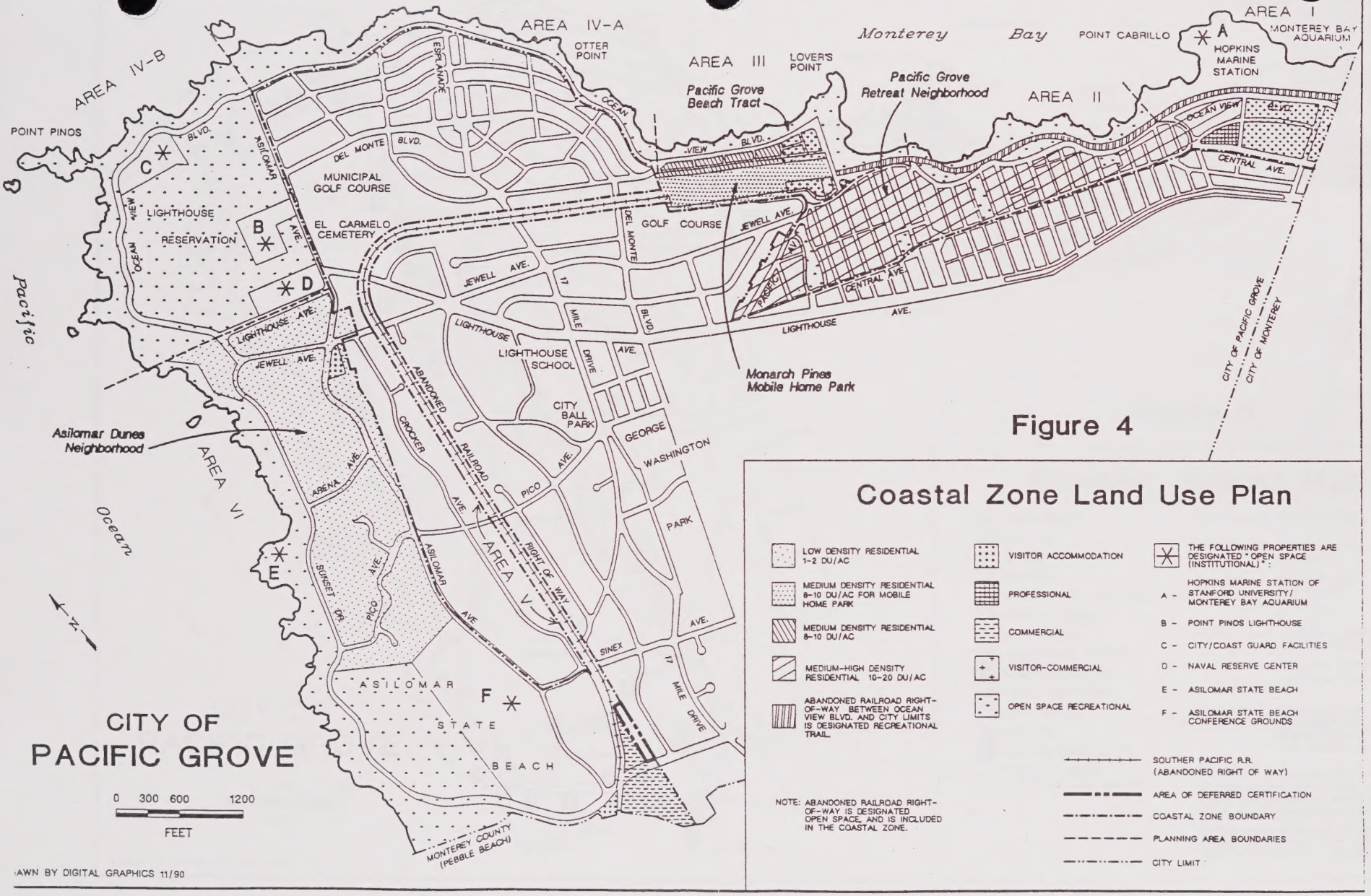


Figure 4

Coastal Zone Land Use Plan

- LOW DENSITY RESIDENTIAL 1-2 DU/AC
- MEDIUM DENSITY RESIDENTIAL 8-10 DU/AC FOR MOBILE HOME PARK
- MEDIUM DENSITY RESIDENTIAL 8-10 DU/AC
- MEDIUM-HIGH DENSITY RESIDENTIAL 10-20 DU/AC
- ABANDONED RAILROAD RIGHT-OF-WAY BETWEEN OCEAN VIEW BLVD. AND CITY LIMITS IS DESIGNATED RECREATIONAL TRAIL
- VISITOR ACCOMMODATION
- PROFESSIONAL
- COMMERCIAL
- VISITOR-COMMERCIAL
- OPEN SPACE RECREATIONAL
- THE FOLLOWING PROPERTIES ARE DESIGNATED "OPEN SPACE (INSTITUTIONAL)":
  - A - HOPKINS MARINE STATION OF STANFORD UNIVERSITY/ MONTEREY BAY AQUARIUM
  - B - POINT PINOS LIGHTHOUSE
  - C - CITY/COAST GUARD FACILITIES
  - D - NAVAL RESERVE CENTER
  - E - ASILOMAR STATE BEACH
  - F - ASILOMAR STATE BEACH CONFERENCE GROUNDS
- SOUTHER PACIFIC R.R. (ABANDONED RIGHT OF WAY)
- AREA OF DEFERRED CERTIFICATION
- COASTAL ZONE BOUNDARY
- PLANNING AREA BOUNDARIES
- CITY LIMIT

NOTE: ABANDONED RAILROAD RIGHT-OF-WAY IS DESIGNATED OPEN SPACE, AND IS INCLUDED IN THE COASTAL ZONE.



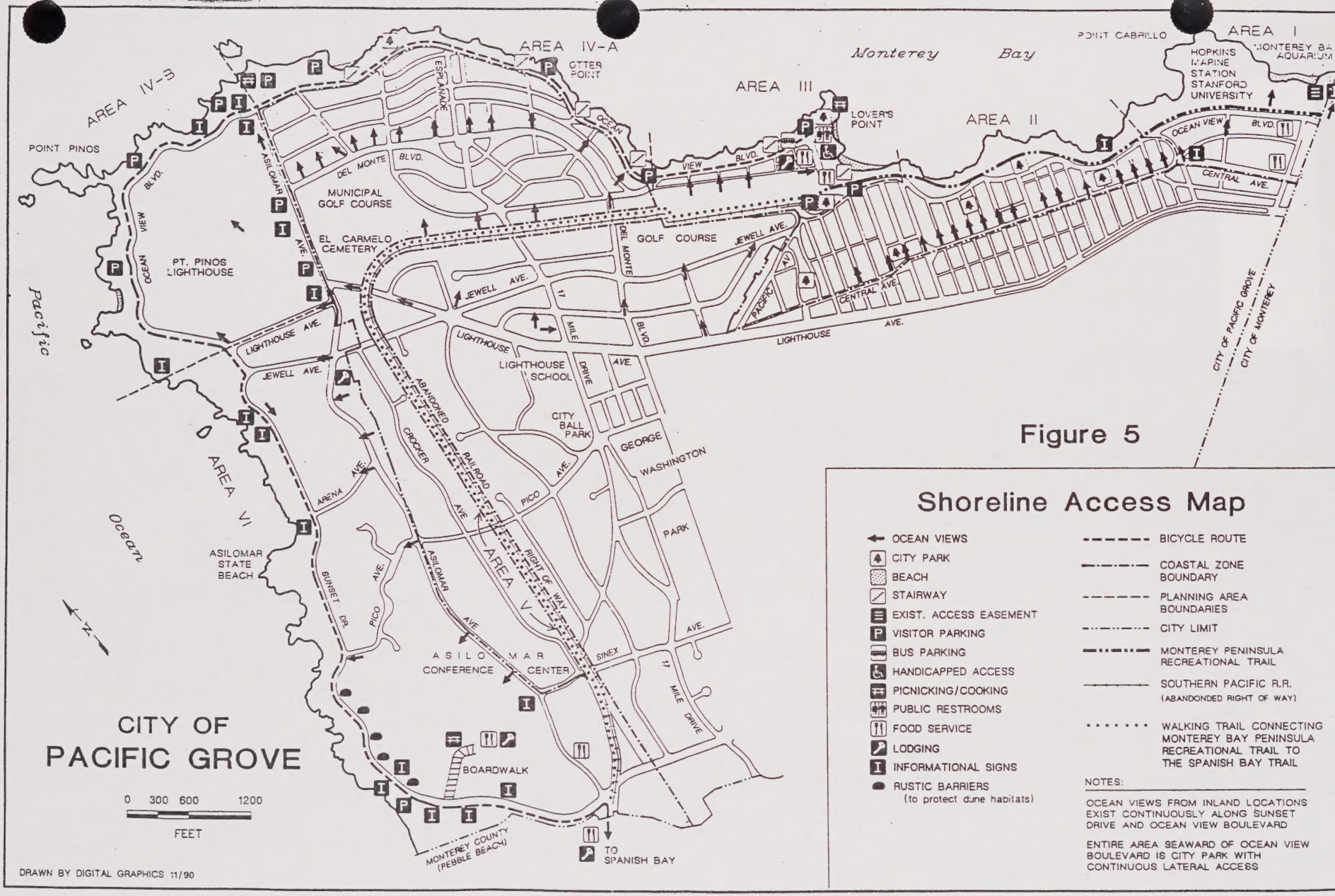


Figure 5

Shoreline Access Map

- OCEAN VIEWS
- CITY PARK
- BEACH
- STAIRWAY
- EXIST. ACCESS EASEMENT
- VISITOR PARKING
- BUS PARKING
- HANDICAPPED ACCESS
- PICNICKING/COOKING
- PUBLIC RESTROOMS
- FOOD SERVICE
- LODGING
- INFORMATIONAL SIGNS
- RUSTIC BARRIERS (to protect dune habitats)
- BICYCLE ROUTE
- COASTAL ZONE BOUNDARY
- PLANNING AREA BOUNDARIES
- CITY LIMIT
- MONTEREY PENINSULA RECREATIONAL TRAIL
- SOUTHERN PACIFIC R.R. (ABANDONDED RIGHT OF WAY)
- WALKING TRAIL CONNECTING MONTEREY BAY PENINSULA RECREATIONAL TRAIL TO THE SPANISH BAY TRAIL

NOTES:

OCEAN VIEWS FROM INLAND LOCATIONS EXIST CONTINUOUSLY ALONG SUNSET DRIVE AND OCEAN VIEW BOULEVARD

ENTIRE AREA SEAWARD OF OCEAN VIEW BOULEVARD IS CITY PARK WITH CONTINUOUS LATERAL ACCESS

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